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ABSTRACT

This volume makes available to a broad readership dissertation findings from social and behavioral sciences research supported by the Employment and Training Administration. Each of twenty-one dissertations, rewritten in the vernacular, is presented in condensed form for primarily nonacademic readers. These popularized selections, which have been reviewed for accuracy by their authors, are divided into two major parts: (1) stresses in the labor market and (2) stresses on the labor force. Bibliographic information, such as author's name, institution, publication date, title, popular title (provided by the rewriters), and accession number is provided for each. A few sample dissertation formal titles and popular titles are the following: "Empirical Study of the Female Insured Unemployed" ("St Louis Woman"), by Phyllis D. Altrogge, "Labor Union Response to Federal Manpower Policy: A Comparative Study of the United Steelworkers of America and the International Union of Operating Engineers" ("Proof of the Pudding"), by David B. Stephens, "Physician Assistants: An Empirical Analysis of Their General Characteristics, Job Performance, and Job Satisfaction" ("Rx for M.D.'s"), by Henry B. Perry III, and "Economic Insecurity, Professional Values, and Political Ideology: A Study of Engineers and Scientists in California" ("New Workers of the World, Unite!"), by Howard P. Greenwald. (CSS)

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A POPULARIZED VERSION OF 21 DOCTORAL DISSERTATIONS

R & D Monograph 70

U.S. Department of Labor
Ray Marshall, Secretary

Employment and Training
Administration
Ernest G. Green
Assistant Secretary
for Employment and Training

Prepared under contract
by Lawrence R. Klein
and Susan Ghozeil
1979

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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Foreword

This is the third publication prepared by Lawrence R. Klein, Adjunct Professor of Economics at the University of Arizona, to make available to a broad readership findings from dissertation research in the social and behavioral sciences supported by the Employment and Training Administration. The present volume, unlike its predecessors, embodies a novel approach. Each of the 21 dissertations has been rewritten in condensed form to reach as wide an audience as possible, particularly nonacademics. Previous publications along these lines contained technical language and complex mathematical equations that were difficult to comprehend, except by academics and other experienced researchers. They were entitled *Baker's Dozen: Abstracts of 13 Doctoral Dissertations Completed Under Manpower Administration Research Grants* (Manpower Research Monograph No. 27) and *Abstracts of Seven Doctoral Dissertations Completed Under Manpower Administration Research Grants* (Manpower Research Monograph No. 34).

In this volume, each of the authors had an opportunity to review and revise the popular version to assure accuracy. Selection of the dissertations and the interpretation of the findings do not necessarily represent the official position of the Department of Labor. Professor Klein is soley responsible for the contents.

The full titles of the dissertations along with the authors' names and the degree-granting universities are listed on the following pages. The listing also includes directions for purchase of the full reports. Copies of each complete dissertation are also available for inspection in the library of the specific university that granted the degree to the author and at the Department of Labor's Office of Research and Development, Employment and Training Administration, 601 D Street, NW., Washington, D.C. 20213.

HOWARD ROSEN
Director, Office of Research
and Development

Dissertation Information

The dissertations on which the popular versions that make up this book are based are listed below, along with their authors, who hold no responsibility for the brief rewrites.

Author and University	Formal Title of Dissertation
Phyllis D. Altrogge University of Missouri (1975)	Empirical Study of the Female Insured Unemployed
Robert M. Feinberg University of Virginia (1976)	Theoretical Implications and Empirical Tests of the Job Search Theory
Stephen T. Marston University of Michigan (1974)	An Econometric Analysis of the Unemployment Insurance System in a Local Urban Labor Market
Robert K. Buchele Harvard University (1976)	Jobs and Workers: A Labor Market Segmentation Perspective on the Work Experience of Young Men
Samuel Rosenberg University of California, Berkeley (1975)	The Dual Labor Market: Its Existence and Consequences
Robert A. Moffitt Brown University (1975)	The Effect of Employment Decentralization on Job Opportunity in the Central City, 1960 to 1970
David B. Stephens University of Texas at Austin (1975)	Labor Union Response to Federal Manpower Policy: A Comparative Study of the United Steelworkers of America and the International Union of Operating Engineers
Clark G. Ross Boston College (1975)	Investigation of Unionized Contract Construction Wage Changes: A Microanalysis 1960-1971
Jeffrey M. Perloff Massachusetts Institute of Technology (1976)	The Wage Change Process in the Construction Industry
Glenn A. Withers Harvard University (1974)	The Political Economy of Military Manpower Procurement in Peacetime
Lucian B. Gatewood University of Wisconsin (1977)	A Comprehensive Evaluation of Recruitment and Training Progarm Inc.'s Apprenticeship Outreach Program for the Construction Trades: An Analysis of Program Performance and Impact
Robert C. Brown Louisiana State University (1976)	An Economic Evaluation of Vocational Rehabilitation in Louisiana
Henry B. Perry III The Johns Hopkins University (1976)	Physician Assistants: An Empirical Analysis of Their General Characteristics, Job Performance, and Job Satisfaction

Popular Title	Accession No.*
St. Louis Woman	PB276300/AS
Seek, But Shall Ye Find?	PB263115/AS
Magic Eye for UI	PB241335/AS
Ask Not What You Can Do for Your Job . . .	PB273809/AS
Never the Twain Shall Meet	PB244320/AS
The Two-Way Stretch	PB243404/AS
Proof of the Pudding	PB263201/AS
Follow the Leader	PB274270/AS
Licensed to Limit	PB265044/AS
Marching Order	PB240753/AS
Upward Reach	PB266 12/AS
Top Dollar Risks	PB274153/AS
Rx for M.D.s	PB263021/AS

Dissertation Information

Gary D. Stohler University of California, Riverside (1976)	Work in the Irregular Economy: A Study of Swapping
Jack N. Singer Colorado State University (1975)	Job Strain as a Function of Job and Life Stresses
Robert A. Karasek Jr. Massachusetts Institute of Technology (1976)	The Impact of the Work Environment on Life Outside the Job
David M. Maklan University of Michigan (1976)	The Four-Day Workweek: Blue-Collar Adjustment to a Nonconventional Arrangement of Work and Leisure Time
Andrew J. Cherlin University of California, Los Angeles (1976)	Social and Economic Determinants of Marital Separation
Howard P. Greenwald University of California, Berkeley (1975)	Economic Insecurity, Professional Values, and Political Ideology: A Study of Engineers and Scientists in California
Larry J. Griffin The Johns Hopkins University (1976)	Social Background, Schooling, and Labor Market Experiences: The Reproduction of Socioeconomic Inequality from Generation to Generation
Michael R. Olneck Harvard University (1976)	The Determinants of Educational Attainment and Adult Status among Brothers: The Kalamazoo Study

*If you wish to acquire one of the dissertations used in this volume, you may order it directly from the National Technical Information Service, Springfield, VA 22151 (phone number 703-321-8543), specifying the appropriate accession number, title, and author. Microfiche copies are $3.00 each. Prices of paper copies vary. Copies may also be examined in the libraries of the relevant degree-granting institution. *They should not be ordered from the Employment and Training Administration.*

	Dissertation Information
Working for Fun and Profit	PB264782/AS
Blues and Blahs on the Job	PB243418/AS
Four Days Shalt Thou . . .	PB263073/AS
Swedes at Work and Play	PB276352/AS
Not for Love or Money	PB274296/AS
New Workers of the World, Unite!	PB273834/AS
Like Father, Like Son	PB263159/AS
Brothers under the Skin	PB267095/AS

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Introduction

Whether professional economist or high school senior, sociologist or city planner, businessman or teacher, seamstress or deep sea diver, you have a stake in the subject matter of the dissertations represented in this volume.

Labor market and labor force problems are economic, social, psychological, and political. They bear heavily on the state of the economy, on the tranquility of millions of people, on the shape of national policy. They involve thousands of people administering billions of dollars. They have generated a significant growth industry. Public policy responding to them is no recent adjunct to what sociologists love to call the polity. We went to war in 1812 because of England's policy of impressing our seamen to help man her ships. We fought a bloody civil war over a policy that had embraced slavery since colonial times. We supported a policy of unrestricted immigration and free universal education to provide a steady labor supply for an expanding industrialism. Then, in the twenties, quotas were imposed to cut down the influx. Throughout our recent history, crucial decisions of policy and program faced up to frictions in the labor market—the New Deal legislation, the civil rights measures, the evolution of legislation that became the Comprehensive Employment and Training Act. "Manpower" as concept and reality nudges into the nooks and crannies of our lives, sometimes unobtrusively, but inevitably shaping our destiny.

The problems are many faceted, and a good deal of research has gone into them. One form of research that the Employment and Training Administration has encouraged furnishes the raw material for this volume—the doctoral dissertation. An increasing number of doctoral dissertations explore the tensions and vagaries of the labor market, and ETA's Research and Development

Office began to cast about for ways to make their findings and implications more widely available, useful, and readable than when interwoven in the scholarly manuscripts themselves.

How to serve up a doctoral dissertation as a tasty dish is a challenge to any author-chef. The search for a suitable recipe came about because the Research and Development Office was eager to experiment with adaptations of the dissertations it had financially supported since 1965—more than 500 up to 1979. It had a strong feeling—which we shared—that the years of work and thought that go into these manuscripts should earn them a better fate than the obscurity that is their usual lot. Typical dissertations, in the social sciences anyway, can be cashed in for a journal article or two if the authors are lucky, and then blush unseen and waste their substance on the desert air of a library, and perhaps become footnotes in somebody else's dissertation.

We were convinced that behind the often-forbidding prose, somewhere in the midst of that thicket of abstruse mathematics and subdiscipline jargon, there were ideas that could be useful to a large number of nonacademics pursuing various interests, if only the documents could be translated into readable and understandable English.

There was an earlier effort entitled *Baker's Dozen* (Manpower Research Monograph No. 27), a fairly plausible name since the volume contained reworkings of 13 dissertations. Although *Baker's Dozen* and a similar publication, *Abstracts of Seven Doctoral Dissertations* (Manpower Research Monograph No. 34), were popular with academicians, they failed to evoke much enthusiasm elsewhere, and the reason became quite evident. Each dissertation had been cut down to about 2,500 words, but too much of the original or similar language and many of the equations remained. So we failed in the earlier efforts. Nevertheless, the introductions to those volumes set forth pretty clearly why dissertations have to be rewritten to become more socially useful and why the Labor Department wanted the present volume done.

The social science dissertation, *Baker's Dozen* said, explores human institutions and behavior, but in the process has become "an institutional phenomenon in its own right. Its completion is an initiation rite; its approval both a signal and a requisite of admission to academic life." But is it, after so much arduous labor and usually nerve-grinding self-sacrifice, just an ordeal by academic fire? Why aren't the dissertations more generally useful?

A number of reasons were advanced. There is the distortion that results as candidates bend and twist their work to shape it to the predilections and sometimes the peculiarities of their approval committees. There are the rigidities of the standardized format of dissertations—at least a century old—that lead the reader to believe that, as with redwoods, when you have seen one you have seen them all. And third, there is the inevitable mass of detail that contains all that the author knows of the circumscribed subject rather than

what most people would want or need to know. Overriding all other reasons, however, are the forbiddingly difficult prose and the penchant, noted in the *Seven Doctoral Dissertations*, "for substituting mathematical models for reflective consideration of [social] problems and the application of findings to their solution."

To one who had read many dissertations, it seemed clear that it is dissertation prose that turns readers off—the tyranny of jargon and the hiding of the light of knowledge under a bushel of strange and sometimes concocted words. Turgidity, stiltedness, and pretentiousness originate in tradition and from a sense that the recondite is the profound—that it is better to write "heteroscedasticity," and be scholarly chic, than to write "unequal variation," and be understood.

In the zeal for quantification and an almost insensate devotion to mathematical models, we find the language of the computer substituted for the language of everyday discourse in an often vain effort to emulate the objective precision of the physical sciences. No offense against mathematical models, which, as *Baker's Dozen* notes, "are potent reflections of technical and theoretical advance." But a danger point is reached when we create models for models' sake and forsake contemplative wisdom, when, as Lord Ashby put it, we "become parasitic upon computers." Jacques Barzun some years back voiced the lament that as "specialties multiplied, the proofs by observation and common sense gave way to mathematical demonstration—in short, science lost communicability through words, and with it lost the eager and informed interest of the educated." Paul Valéry phrased it nicely: "Words no longer consummate the act of the mind's possession." It might have a salutary effect if all social science Ph.D. candidates heeded the dictum of Howard Rosen, ETA research director: "Too many researchers are intellectually crippled by the need to smother themselves in the security blanket of masses of data. Sensitivity, alertness, and awareness—offsprings of experience and exposure to research problems—may be more helpful in seeing the totality and interrelationship of problems than the data from surveys of the universe of populations." We apotheosize models, and their message is often taken as gospel and translated into policy uncritically. It's as if the old hymn were parodied:

It may be nonsense, this I know,
But my model tells me so . . . .

Sober reflection convinces us that the quality of writing and the gradual abandonment of verbal for mathematical symbols are but symptoms of a larger problem with the dissertation and its potential for usefulness. The main deterrent to usefulness is the whole current philosophy of how to become a doctor of philosophy.

All of which brings us back to square one. What we set out to do in this volume was to rewrite the dissertations so that a fairly bright senior high

school student could readily understand them. That means the level we sought fell somewhere between high school and *U.S. News and World Report*, with a strong leaning toward the latter.

We set two inflexible rules for this book: no equations and no jargon, which might lead one to wonder what was left.

The answer is that what is left is the substance without the form of the theses, all that is necessary for understanding the purpose, the approach, the findings, and what the author thinks are the applications of what was found out. For nonexperts, there are kernels of ideas; for experts, there is an easy-to-read resume that may not only induce them to go to the original but guide them to the parts that are most useful for their interests or needs.

The Office of Research and Development sent us 40 dissertations from which we were to select a suitable number. The only admonition was to make them *very* readable, with new titles that would be eye-catchers.

At the outset, 12 to 15 titles seemed sufficient; but, as the task developed, we became intrigued with the possibilities of other papers. As the number grew, the subject matter seemed to separate the dissertations into the two parts indicated in the Contents–which almost equally divides them between economic and sociopsychological analyses of the labor market and the labor force. One can track the range of subjects from the psychology of the flea market to the economic and political cadence that controls the military labor market. We ended up, as the title indicates, with 21, a number that can relate to both Las Vegas and New York cafe society.

These papers were not selected because they were "average" or the "best" (although some of them were among the best) but because they showed the broad limits of subject matter the program could encompass and because they were adaptable to popularization. Some were eliminated because they were concerned principally with methodology or were not strong in policy recommendations or practical applications.

Reverting to the earlier metaphor, what kind of fare have we concocted? Something of a bouillabaisse, and although not all of the ingredients are of equal quality, they do blend pretty well. Four sets of articles are close enough in subject matter to warrant grouping under generic headings. Looking over the formal titles, one can't help being impressed by the variety and extent of subjects. Job search, young workers, central-city migration, wage setting, labor union attitudes toward CETA programs, the four-day workweek, marriage breakups and economics, family influences on job market success, professionals and politics–to mention only about half of them.

We sincerely trust that what is laid out is a readable, engaging, and useful primer that points up some of the most vexing problems that beset the labor market and the labor force. The dissertations were selected to achieve this end. Not one "new" problem was discovered, but there is always hope that

additional minute examination by a young scholar will suggest new approaches to old problems.

As *Baker's Dozen* pointed out, "It is only when society gets more mileage from the dissertation that the movement from point A.B. to point Ph.D. that the real payoff from the human and monetary investment is realized." That is why the Office of Research and Development continued to support dissertations exploring subjects germane to the overall objectives of the Employment and Training Administration and why it selects grantees from many disciplines.

It is useful, we think, to give the reader a few concrete examples of some of the matters we have been discussing and some feeling of the warp and woof of dissertation fabric. We start with writing samples that illustrate fairly obvious points. While they are random selections from a large collection of manuscripts, none is from a dissertation used in this volume.

> Extrapolating from cross-sectional data, we infer that transformations in the clustering of roles occur during the careers of engineers and scientists, with progressively greater involvement in teaching in evidence as they move through the career sequence; increasingly less involvement in both basic and applied research; and increasingly greater likelihood of administrative, managerial, and supervisory duties occurring in the middle stages of the career.

By way of comment, would the author have lost one iota of meaning if he had simply stated that "as scientists and engineers get older, they are more likely to teach and less likely to do research, but their roles of supervisors most often come in the middle stages of their careers"?

> What impresses me first and foremost is that dual allegiance is not really a thing in itself, a piece of mental structure which is either present or absent. It is, rather, a process and it is one that is in a fluid state depending on factors inside the individual, outside of him in the relationships of the two specific groups he has joined, and on factors even further outside of him within the larger society, namely the characteristics and values inherent in the socio-economic structure of our society.

When we strip away the jargon and untwist the convoluted sentences, the essence of the paragraph appears to be that in a choice of loyalties, people will be influenced by various factors, including self-interest and the circumstances that affect their lives at the time.

> As viewed in this tradition of thought, the self is really a plurality of selves. An individual carries on a whole series of different relationships

> to different people. We are one thing to one person and another thing to another. A variety of selves exist for a variety of associates in traditionally differentiated situations. There are different sorts of selves answering to different sorts of reactions. What determines the amount or sort of self that will get into communication is the social experience itself.

What a difficult way of telling us that different situations bring out different characteristics and responses!

> The elevation of the group on the psychopathic deviate (Pd) scale also bears note. The Pd scale indicated that the business agents, as a group, tended to be personable but to have little emotional depth, and to have not internalized the societal norms.
>
> The elevation on the hypomania (Ma) scale, indicative of a tendency toward overactivity and enthusiasm, also seemed to be related to role demands.

Now this is a particularly difficult passage. It is from a study of Teamster Union business agents. After a struggle with the meaning, we followed a very sensible course—taking the excerpt to a Teamster business agent. He studied it, and after a bit said, "It means they was nice guys but bums."

Nagging doubts over the adequacy, value, and significance of data haunt many dissertation writers. The author quoted immediately above, for example, concluded that it "was impossible to arrive at a firm generalization from the data presented." In another work, a hint of despair can be detected in the summation that "the present work is bereft of solid policy implications."

One can detect a measure of frustration in this candid statement:

> I must admit . . . that the bulk of the variance . . . remained "unexplained" by the specifications I developed. There appears to be a great deal of variation . . . which cannot be accounted for by a short list of economic and social demographic characteristics. Marital separation is ultimately a personal matter, and its many causes may not be easy to aggregate using impersonal survey measures.

At times, dissertation authors travel a new and arduous path to a pretty well-visited destination. For example, "Performing well in school, even independent of the specific track of courses taken, also promotes educational attainment." On occasion, they travel a somewhat circular path: "In addition, the economic model supports the simple argument that the answer to problems created by unattractive, low-wage unstable jobs is their replacement with

stable, well-paying jobs in which individuals can develop and express their talents." And assertions that are not difficult to accept, even without demonstration: "In addition, the economic model moves us toward an inclusion of women as active participants in the process of marital separation."

But dissertations also present conclusions that run counter to conventional wisdom. We discover that it is not quite true that the flight of industry from the central city to the suburbs leaves stranded working populations without job opportunities. Both employment opportunities and wages in factory jobs improve, in part because of the migration. In another instance, we read a strong assertion that strikes in the construction industry generally are called "to correct some local, nonwage-related grievance or to reestablish . . . existing monopoly power." And in a harking back from 1978 to 1848, we are brought up short with the notation that Marxism lives: "The working class, as the living and breathing part of capital, by setting in motion the process of surplus value production, becomes the raw material for exploitation."

To end on a positive note, we quote from a dissertation (and there were others) that was a joy to read. Its theme was important and the writing was fresh, engaging, witty, and at times sardonic. The author was not bound or intimidated by the conventions of his discipline and did not consider reflective thought a heresy:

> Conscription is a topic that generally has not been well served by scholarship. The wide range of issues and the depth of public feeling on the question have not matched well the scholar's propensities for narrow specialization and presumed objectivity . . . . [Thus] we have felt it useful here to broaden the approach to that of "political economy" and give deliberate attention to some of the political factors and value considerations . . . . Naturally the extended topics . . . reflect the biases of the writer. But to expect otherwise would be foolish. "Objectivity" does not mean "value-free" enquiry . . . .
>
> In national security matters, the view is indeed quite common that the state knows better than its citizens what is best for the national well-being . . . . But this is a dangerous argument with crucial limitations, for state power has been known to be predatory and, even if well motivated, fallible. It should be obvious, after all, that in a war one side, at least, must be encouraging evil.

A note of sympathy should be injected for the dissertation authors, all of whom doubtless feel that we have done violence to what is—at least thus far—the major work of their lives. On our part, every effort was made to give a faithful presentation of those portions of the thesis that seemed useful for the purpose of this book. The odds are that they won't believe a word of this.

But they should take comfort in the possibility that uncountable hundreds more people will be aware of their scholarly toil than just the spouses, kiddies, parents, committee members, and faithful editors and typists listed in their acknowledgements pages. We have kept our commentaries to a minimum. But if a sardonic note creeps into our prose here and there, charge it to a revolt of the nervous system after reading about 100 dissertations to select the luckless ones for the three volumes thus far printed. We probably have read more cubic centimeters of dissertations in a shorter period of time than anyone else in the world. After a bit of such reading, one becomes afflicted with a kind of footnote-induced mesmerism. All texts acquire a striking similarity. Authors apologize for data deficiencies as a hedge against yawning gaps in evidence or conclusions that don't quite make it. They almost invariably call for more study of the problem and refrain from more than a half-hearted pass at policy proposals.

What constructive suggestions can be made for the whole dissertation complex? The doctoral thesis should be the capstone of formal academic training, the measure and very symbol of learning in a classical sense. It should be the mark of the broadly educated person. Yet the outstanding features are its narrowness, its frequent purblind avoidance of interdisciplinary interest and lack of literary grace or niceties, its seeming disinterest in the relationship of theme to broad movements of history and social development. In short, it is barren of the "philosophy" that gives substance and grandeur to the symbol Ph.D. Has the title become a cliche, divorced from both meaning and significance, the shining ideal tarnished by the dross of specialization? Is today's Ph.D.—let's say in economics—truly educated or just a finely trained and sharply honed specialist-technician who is skilled in mathematical statistics, regression analysis, and the accepted truisms of the market?

There is danger in such single-track study and lopsided knowledge, wherein undivided attention to the composition and movement of the gross national product will contribute regrettably but inexorably to the composition of the gross national ignorance.

There could be a change so that the bedizened instrument known as the doctoral dissertation would give full scope to the integrative powers and imagination of students. Of necessity, doctoral candidates would break out of their disciplines or subdisciplines to follow a field of inquiry perhaps only tangentially related to their major academic subject, simply for pleasure and sheer love of knowledge, and thus the P, the H, and the D could stand for Pindar, Herodotus, and Dante as well as Pigou, Heller, and Dunlop.

Of course, it is not realistic to suppose that academic practice, with its rigidities and tendencies toward institutional clannishness, could be changed without a lot of both stimulus and courage, abetted by some specialized grants. But suppose a university were offered a fairly munificent grant to

allow a group of candidates to write a new kind of dissertation, to be sponsored on a universitywide basis, leading to a Ph.D. in interdisciplinary achievement. A scholar whose principal interest is manpower economics need not batter down open doors to prove once again that, when times are tough, workers tend to quit looking for a job or that unemployment of black teenagers is high, mainly because of job discrimination and poor education. Rather let the student, for example, study 500 years of British poetry and build some interesting analogues to British economics, political history, and social change, as indeed Raymond Williams in large degree actually did in *The Country and the City*. Such a study surely would demand greater individual knowledge, imagination, and research ingenuity than counting soft vowels in Spenser.

The Research and Development Office has for more than a decade and a half performed an act of good government by sponsoring dissertation grants, a pioneering and exemplary program. To pioneer again by putting its shoulder to this particular wheel of progress might start a revolution.

Back to reality.

If this essay has given readers the impression that the faults enumerated here are common to all dissertations—or particularly to those represented in this volume—let there be a vigorous dissent. There are good, medium, and fair specimens included, a reasonable cross section of subject and quality. This Introduction intends neither to extol nor condemn the selections, but rather to speculate on the institution of doctoral theses, impediments to usefulness, causes of communication problems, and susceptibility to improvement. No institution is beyond redemption, and it is the unanimous vote of the two undersigned that the dissertation can, should, and probably will be saved.

Along the way, we gratefully received some specialized help from three University of Arizona professionals. Ronald L. Oaxaca, associate professor of economics, Marilyn K. Spencer, instructor in that department (who, as a graduate student, worked on the two previous volumes), and Barbara P. Sears, editor of the *Arizona Review*, rescued us from the toils of a few difficult econometric and editorial problems. We also appreciate the suggestions, patience, and forbearance of four staff members of the Office of Research and Development of the Employment and Training Administration—Howard Rosen, its director, Robert E. Manifold, Fernand P. Guay, and Judah Drob. At the same time, we absolve these seven from all blame.

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Part 1.
Stresses in the Labor Market

Job Search Trilogy

I. St. Louis Woman

The study does not confirm the claims that the present system of unemployment compensation presents wholesale lures to stay out of the job market.

It is appropriate that the Altrogge, Feinberg, and Marston studies are printed in sequence. They give us views of the same broad problem from different angles. Dr. Phyllis D. Altrogge raises the question of whether women get much-needed assistance from unemployment insurance (UI) or whether UI benefits, by providing them with the wherewithal, encourage them to loaf instead of looking for a job.

The aim of unemployment insurance is to provide short-term income to ease the hardship of short-term unemployment for workers usually on a steady job. But a number of researchers have expressed some skepticism as to whether all women recipients of UI were "steady and regular" workers whose plight was temporary and who were actively looking for a job. The conclusions of the studies were the kind to raise the hackles of a women's libber.

Despite these previous studies, Altrogge was a doubting Thomas and set out to see if it were really true that women in St. Louis tend to receive unnecessarily more UI benefits than do men.

True, the number and percentage of women in the labor force have increased a good deal since UI came into being, but so has their unemployment rate relative to that of men. Since 1961, the jobless rate of women has been consistently higher, and the gap has grown wider.

Altrogge's first step was to measure relative differences in unemployment

between men and women in the group studied. She then focused on the factors that might explain differences in the amount of work these men and women were willing to supply. Step three was to use this information to judge whether the original contention that women "abuse" unemployment insurance benefits is defensible.

Women have been thought to use their unemployment insurance income as a substitute for earned income much more than men for two main reasons:

1. They have greater responsibilities in the home than do men and need to spend more of their time on housework.
2. Their wages are relatively low compared with men's wages and thus they sacrifice less income by not working outside the home.

Motives for not seeking work, of course, vary from person to person, depending on preferences for having free time rather than buying goods, and upon age, education, number and ages of children, and other variables. Among these factors, probably the strongest is the presence of young children in the home.

Many social characteristics vary considerably by race. Black women have consistently higher labor force participation rates than do white women. Probably married black women cannot rely on their husbands' earnings to increase as much as those of white men. And many of the better educated black women may view themselves as their families' primary worker.

Altrogge assumed that a lot of things influenced the length of a person's unemployment. Among them were:

1. The difference between the weekly unemployment benefit and the expected weekly wage at a new job.
2. The household's nonemployment income other than unemployment compensation (such as interest income, rents, and workmen's compensation).
3. Social characteristics—such as age, education, and whether the woman was the head of the household.

Two unemployment measures were used. The first was the duration of unemployment before the woman found a job. The other was the total unemployment time in a year. This second measure encompassed both those women who never found a job during the benefit year and those who had more than one spell of unemployment during that period.

Estimating involved some complications. Finding out what weekly wage each unemployed woman wanted proved to be difficult and it would be likely to change, anyway, the longer she remained unemployed. Hence Altrogge tested four substitutes (or proxies) for the expected weekly wage in an attempt to find the best one. They were (1) The wage received in the job immediately preceding unemployment, (2) the minimum asking wage during job search, (3) an average of these two, and (4) a composite of (a) minimum asking

wage at approximately eight weeks after filing for unemployment benefits and (b) the first acceptance wage if she had accepted a job by that time.

Men tended to set their initial asking wage lower relative to their last wage than did women. One possible explanation is that men's previous jobs required more specialized skills that may not be worth so much to a new employer. Another reason may be that women's wages frequently rise very little above their entry-level, and they may view their former wage as a reasonable approximation for future wages. In short, different groups form their expectations in different ways, and a good proxy for one group may not be the best choice for others.

The survey Altrogge used came from a 1971-72 study undertaken for the Missouri Division of Employment Security to evaluate the Service-to-Claimants program in the St. Louis area. Excluded were those who seemed reasonably sure of getting a job within five weeks. Also excluded were a small number judged to need more extensive assistance than that provided by the service program. The resulting sample included UI claimants who were not attached to jobs or unions who were in need of job-search assistance, but who were not "hard core" unemployed. Followup interviews during the benefit year were conducted by the Public Opinion Survey Unit of the University of Missouri.

The importance of the factors working against a successful job hunt were estimated separately for blacks and whites, because the author assumed that the labor market experiences and behavior of the two groups were significantly different. The study also considered the women who were and were not heads of households separately, to see whether these two groups differed in efforts to find work. The survey team questioned members of the sample about the efforts they put into their job search, to observe whether all were actively seeking new jobs.

The major finding of the study was that unemployment compensation does tempt white women and black men to stay out of the job market. For white men, there was some evidence of a weaker job hunt, but this was not so for black women, a finding counter to popular belief.

The results for white women showed that every $1 per week increase in the difference between first accepted wage and unemployment benefit amount shortened the first unemployment period by about one day.

Using the total unemployment time in the year, Altrogge found that white women most often used former wage as the standard for expected wage. Time out of work increased by one day for every $2 increase in the difference between weekly expected wage and benefit amount. This group experienced just over a one day increase in unemployment for every $2 increase in weekly nonemployment household income.

Former wage was the best means of explaining the length of the first completed spell of unemployment for black women. Using this measure, Altrogge

found that they showed no significant lack of desire to work because of unemployment benefits. But for every $1 increase in nonemployment income in the home, they responded on the average with a one-half day increase in the length of their first completed unemployment period.

Age appeared to be an important determinant for white women, with those of childbearing age having longer spells of unemployment. This was not true for black women.

White women who were household heads tended to be less inclined to hunt for jobs while drawing benefits. Their first completed spell of unemployment increased by 1.5 days and total benefit-year unemployment by 1.16 days for every $1 decrease in the difference between their expected wage and their benefits. But nonemployment income did not appear to deter them from looking for work. If they were not household heads, unemployment compensation had no effect, but every $1 increase in their nonemployment income lengthened the first spell of unemployment by almost four days.

Perhaps those who are not heads of households have a more voluntary attachment to the labor force, preferring a job to staying at home. But those who are the primary earners may work only out of necessity; they may look forward to spending time at home as long as unemployment benefits reduce the financial sacrifice.

Black women who were not household heads had less total time out of work during the benefit year the greater their unemployment income. This finding is consistent with the theory that the higher the socioeconomic status of black women, the more likely they are to have a labor market attachment. It was pointed out that some black female heads of households with dependents but no other family wage earner apply for welfare and are not in the labor market. Others may be in jobs that do not qualify them for unemployment compensation when they become unemployed.

The study does not confirm the claims that the present system of unemployment compensation offers wholesale lures to stay out of the job market or is responsible in large part for the present high unemployment rates. Nor does it support those who call for major revisions designed to shift more of the cost onto the unemployed worker.

One cannot disregard the effects of UI on white women household heads, however. That they were the most seriously affected of the groups studied may reflect the heavy personal costs involved in being the primary worker both in and outside the home. Many of these women have child-care expenses that consume a sizable portion of their take-home pay. Hence UI benefits plus the savings on child-care costs during a period of temporary unemployment might offset lost wages. Providing reliable child-care facilities at low cost could hasten and intensify their search for jobs.

The data gathered on intensity of job search indicate that some of the

unemployed do not actually consider themselves available for work. A better screening could prevent these claimants from collecting benefits.

Unemployment compensation had no effect on the average length of unemployment of black women. For them, other measures are needed to reduce unemployment—increasing the number of jobs open to them, upgrading their skills, and assisting them in their job search.

II. Seek, But Shall Ye Find?

Unemployed workers don't engage in a dawn-to-dusk trek on the job hunt trail; sometimes they are content to wait for opportunities.

The anatomy of unemployment has been probed, studied, and argued about, probably from at least the time of the Elizabethan poor laws. During the Great Depression, students of the subject were generally agreed that there were three main types, seasonal, technological, and cyclical. Today the prevailing classification is frictional, structural, and "insufficient aggregate demand." Dr. Robert M. Feinberg holds with this breakdown but hastens to point out that the three types are usually present at the same time.

Frictional unemployment results when workers are between jobs, usually because they have voluntarily left one. They had a fight with the boss, wanted to move to another location, were bored or unhappy, or thought they could do better elsewhere in a short time. All of these are similar reasons for a change flow from the ease of a free labor market and point to the high degree of labor mobility that has always prevailed in this country. Making information on job openings more readily available would at least shorten the duration of frictional unemployment by helping out in the job search process.

Structural unemployment stems from inability to match the existing skills of unemployed people with the requirements of unfilled job openings. It could come about because the unemployed are deficient in general education or lack specific job skills. An obvious policy prescription would be an appropriate training program. Another cause is that workers with the proper skills

may be restricted to their town simply because they haven't the wherewithal to move to places where likely job openings exist. Here a policy that would make the move possible is an obvious solution.

Insufficient aggregate demand is another way of labeling unemployment due to lack of purchasing power for goods and services; it could also be called "boom and bust" unemployment. The policy solution would appear to be stimulation of demand through government fiscal and monetary actions.

But at any given time, how much unemployment can be tied to each of these types? It is far from easy to tell; yet a mistake in identification can be pretty serious. For example, if what is largely a structural unemployment problem is misdiagnosed as weak demand, the "cure" could lead to severe inflation with little reduction in the unemployment rate. Similarly, if a demand problem is mistakenly believed to be structural unemployment, training programs will have no significant effect on the unemployment rate and will produce much frustration and disappointment among the graduates of these programs. In practice, the best that policymakers can hope for is to have some feel for the relative importance of each of the three categories of unemployment without any precise knowledge of the numbers of unemployed in each.

Feinberg checks out a method he has worked out for describing how unemployed workers look for jobs and what motivates them. He makes no attempt to distinguish among the various sources of unemployment, but accepts conditions as given and investigates the hunt for jobs under those circumstances. He points out that it is important for policy purposes to find out whether unemployment ordinarily leads to a productive job search.

According to the job search model adopted in this study, unemployed workers are assumed to know the kinds of wage offers open to them. That is to say, they know the probabilities of finding jobs at various wages. Each worker knows the direct cost of a job hunt per period of search, which is assumed to be constant. The study also assumed that the worker received one job offer each period and must either accept or reject it on the spot. Thus, in this model, the unemployed worker does not have the luxury of letting offers pile up and selecting the best. Hence the smartest move for the worker would be to decide on the lowest acceptable wage before starting the job hunt. Having done so, the worker will grab the first job to come along at a wage at or above this minimum.

But how do workers select their minimum? Naturally, they try to get the most from their search by choosing a wage at which the benefits from obtaining that rate of pay equal the cost of continuing to look until offered that rate. If they set the minimum too high, then the benefits from a longer search fall short of the cost. Conversely, if they set the wage too low, the benefits exceed the cost, or in other words, they could afford to look longer and would gain by holding out for a higher wage.

An important issue is whether an unemployed person will find it worthwhile to look for work or decide to drop out of the labor force. What determines this choice? Dropping out offers some payoff if there is some nonlabor income, such as public assistance. Sticking to the job hunt thus involves a comparison between the acceptance wage and that income. If the acceptance wage most to the worker's advantage falls short of the nonlabor return, the individual sees dropping out as a better course. If the wage exceeds the gain from dropping out, commonsense will dictate a continued job hunt.

It might seem more reasonable to seek a different way to appraise job search—one that permits the minimum acceptance wage to decline over time. The idea here is that the sobering experience of going week after week without a suitable job offer could induce unemployed workers to lower their sights. But Feinberg cites studies showing that the decline in the minimum asking wage is negligible over a long period of time. Hence he finds it reasonable to assume a constant minimum asking wage.

Feinberg tested his job search model with data from the Panel Study of Income Dynamics conducted by the Survey Research Center of the University of Michigan's Institute for Social Research, supplemented by data from the 1970 Census of Population. He concentrated on male heads of families in 1969, 1970, and 1971, using the 1970 data to experiment with the statistical form of the job search relationships in order to obtain the best results for the year. He then tried out these results on 1969 and 1971 data. His sample represents a significant portion of the entire labor force.

Feinberg's work quite successfully explains the expected duration of individual unemployment and labor force participation. The costs of job search had the expected negative effect on the length of unemployment and labor force participation. However, as he points out, other factors could also enter into the results. To test the job search theory by itself, he estimated more restrictive relationships involving the minimum acceptance wage as well as duration of unemployment and labor force participation. Tests results were mixed.

The unemployment insurance system has lengthened the expected 1969-71 duration of unemployment somewhere between 6% and 23%. This means that an increase of $10 a week in unemployment insurance benefits could stretch out unemployment by one week. The results also suggest that measures such as occupational training, designed to raise the average wage offered to an individual, really don't much reduce expected length of unemployment. However, such measures do raise lifetime earnings and increase labor force participation.

It turns out also that unemployed workers don't engage in a dawn-to-dusk trek on the job hunt trail. Other activities such as just plain leisure or waiting for jobs to turn up are also important occupiers of an unemployed worker's time. Feinberg feels that, before we can have an effective labor market policy, we must learn much more about the activities of the unemployed.

(MARSTON)

III. Magic Eye for UI

Predicting UI benefits is like shooting at a moving target . . . because legislative changes almost every year complicate predictions.

Suppose you run the unemployment insurance (UI) operation in a large city. Among the many problems that you worry about are how much money will be spent on benefits in a given time period, how many new claims will be filed, how many persons will run out of benefits, what the chances are of people finding jobs, the extent to which unemployment feeds on itself, the effect of general economic trends on these factors, and similar vexing realities.

And one of the things you might speculate on is what changes might take place there if the legislation governing UI were changed.

The need for ability to predict what will happen under various circumstances was brought home with a kind of frightening suddenness during the recession of 1974-75, when a rather large number of States ran out of money and had to borrow Federal funds.

Dr. Stephen T. Marston has developed a method to handle such forecasting. He studied the Detroit unemployment insurance system from 1967 to 1971, and although only this one jurisdiction forms the basis of the results, they shed a good deal of light on the way a UI system actually works. Moreover, the method that Marston uses can be adapted to any jurisdiction to provide information for policy decisions.

The future trends in UI benefit experience are far from easy to forecast. For example, if you want to know for any given period the number of insured

unemployed and the number of persons whose benefits run out, you have to estimate the chances of a claimant finding a job, running out of benefits without getting work, or continuing to receive benefits. And these probabilities, Marston points out, vary with changes in local economic conditions. The chances of finding work decrease as a person is out of work longer, especially during the first few weeks of unemployment. But Marston argues that the reason is not a loss of skills, as some people believe. A few weeks is too short a time for a worker to drift toward unemployability. Moreover, there is too much difference among workers for the cause to be either loss of desire or loss of skills. The most employable find work very quickly, and the remainder over a fairly long period of time. But generally, length of unemployment increases with the overall unemployment rate and the reduction in hiring rates.

Bad times mean less or no hiring by business and, if depressed conditions persist, shorter workweeks and layoffs. Layoffs are costly to employers because they result in higher UI contributions and necessitate some training when the firms start hiring again. Consequently, Marston speculated that there is a time lag between a firm's not hiring and laying off workers. To test this assumption, he related hiring and layoff rates to current and past changes in employment and came up with results indicating a time lag under certain conditions. The implication is that, when substantial numbers of workers are laid off, they are likely to have considerable difficulty in finding new jobs.

The number of initial UI claims in any given month is closely related to current and recent layoffs. The proportion of laid off workers who file claims depends upon the level of business activity. Expressed in concrete terms, Marston's prediction is that, of every 100 workers laid off, 73 will file UI claims. Also every 1% rise in the hiring rate will reduce the number of claims resulting from 100 layoffs by 19.

Turning to the total number of persons receiving first UI payments, he found that it is a function of the number of people filing claims in the previous and current month. For every 100 initial claims filed, 81 will be approved, with payments for 46 claimants starting in the current month and 35 in the following month; 19 claims will be turned down.

To complete the calculating model, Marston predicted total monthly benefit payments by relating them to certain economic factors. Average weekly benefit amounts are high when demand for labor is low, as one might expect, because the people filing claims are primarily employable workers whose relatively high past earnings entitle them to a large weekly benefit. And the opposite holds when demand is high and the claimants are likely to be disadvantaged workers whose previous low earnings entitled them to fairly low weekly amounts.

An additional factor used in constructing his Michigan model is the State's cost-of-living escalator based on the Consumer Price Index. Hence Marston

calculated the total amount of money needed for a given month's benefits as a function of the number of weeks of compensation, the unemployment rate, and the price index. Working out his formula, he found that total UI benefits for a month are directly related to each of these items.

His method can easily be used to do the forecasting job he thought it could to estimate the effects of changing labor market conditions. But it has additional uses. Marston can employ it to work out the costs of a number of "what if" situations. Under labor market conditions identical to those of 1971, for example, what if the Michigan UI law were amended to cover all self-employed persons? In that case, Detroit would have a 7% increase in insured unemployment, benefit exhaustions, and total dollar amount of benefits and a 25% rise in total dollars spent for benefits. Again under 1971 conditions, if all persons eligible for benefits were to receive them for exactly 26 weeks, insured unemployment would go up 13% and total payments by 15%, and the number running out of benefits would fall by 37%. Finally, he looked into what would happen under the same market conditions if the maximum duration of benefit checks were raised from 26 to 39 weeks, but the recipients were still subject to the Michigan provision that, for every three weeks of benefits earned, the worker must have been in covered employment for four weeks. What would happen in Detroit, Marston's calculation predicts, is that insured unemployment would jump by 6% and total dollar benefits by 7%, but the number of people running out of benefits would fall by 18%.

There is a lot of flak about whether unemployment insurance discourages people who are getting it from looking for work. Unemployed workers, the argument goes, enjoy subsidized leisure instead of going out to hunt jobs. If this is so, UI prolongs unemployment and maintains high unemployment levels irrespective of job opportunities.

Marston's model is a very handy gadget, and it can help provide some insights to this matter also. He took his model estimates for Detroit and combined them with considerable information contained in other people's studies for the entire United States. This let him compare the average length of unemployment in 1969 for workers receiving UI benefits and for all workers. His important finding was that the likelihood of staying out of a job for an additional week was very nearly the same for the two groups during about the first 10 weeks of unemployment. It was greater for the insured workers, however, after 10 weeks. A reasonable inference is that short and medium spans of unemployment involve mainly workers on temporary layoff who expect to be recalled imminently and thus are not beguiled by any vacation prospects made possible by the weekly benefit checks. Long-term unemployed workers are more likely to fall prey to those lures.

How did Marston's estimates of UI effects work out in concrete terms? In 1969, the average national unemployment rate was 3.5%. Using his method,

Marston figured that, in the absence of an unemployment insurance system, the rate would, at the very least, have been no lower than 3.2%. These figures suggest that the present unemployment insurance system has had virtually no effect on the overall unemployment rate.

He carried the matter a little farther. He estimated that about 2 out of every 5 spells of unemployment in 1969 were covered by UI benefits. If the other three had been under benefits, the U.S. unemployment rate could have gone as high as 4%.

Then he tried out another change, a rise to 36 weeks in the maximum duration of benefits. Taking the same 2 out of 5 ratio for the proportion of unemployment spells covered by unemployment insurance, he found that the percentage of unemployment would have gone up to only 3.6. If all persons with spells of unemployment had been covered, the rate for joblessness would have risen to only 4.5%.

He extended benefits to a full 52 weeks. Had the same 40% of unemployment periods been covered by benefits, the overall unemployment rate would have been 3.8%. Stretching coverage to all workers who had unemployment would have raised the jobless rate to 4.9%, compared with the actual 3.5%.

Of course, these are hypothetical cases; the figures are subject to many variable situations. The importance of Marston's work is that it enables those interested in the administration and economic consequences of unemployment insurance laws to pursue three worthwhile approaches to current problems: (1) To forecast the functioning of the current system; (2) to examine the effects of proposed changes in the system; and (3) to provide some factual information on the effect of UI benefits on beneficiaries' search for jobs.

He warns that trying to predict UI benefits "is like shooting at a moving target" because legislation governing them changes almost every year, "even if employment, unemployment, and labor turnover remain constant."

The model, to quote Marston, "provides a systematic study of one of the most crucial issues in manpower economics, the extent to which the government creates unemployment through the UI system." He feels that the policy implications of his findings are clear enough: "neither the boosters of UI, who deny any disincentive effect . . . nor the attackers . . . who blame UI for a large amount of unemployment were found persuasive." The existing system perhaps caused 0.3% unemployment. Maybe even this cost could be justified if the system resulted in better jobs and better job placement from increased time to hunt jobs. No one really knows, but the figure does not conjure up a vision of "armies of unemployed malingerers and UI chiselers."

As for expanding the system, he urges caution. Longer maximum potential benefit durations and wider coverage substantially increase the length of insured unemployment and the overall unemployment rate.

Ask Not What Your Job ...

It's the kind of job more than the kind of person who holds it that influences occupational success and satisfaction.

Most labor market economists assume that workers' success in finding and keeping good jobs ultimately depends upon what they have to offer—native ability, formal education, and skills, all referred to as "human capital." A small number of theorists, however, argue that it's not what you bring to the job, but what the job gives you, that counts.

This second viewpoint is called labor market segmentation theory. It emphasizes the trappings of the job—such as custom, laws, and collective bargaining—that limit wage competition, ability to change jobs and companies, and the part of town where one lives.

If you believe that individuals determine their own success, you would explain unemployment, employment instability, worker dissatisfaction, and low earnings in one way. But you would find totally different causes for these problems if you think the jobs are to blame. As a result, you could have two quite divergent policy recommendations.

Dr. Robert K. Buchele produces a finding that job characteristics have a very important bearing on unemployment, turnover, job satisfaction, and income. "Even workers who are apparently quite deficient in their human capital endowments would succeed in good jobs," he says. Failure besets workers more because of the kinds of jobs they have than because of their personal attributes.

His view is that work experiences are determined simultaneously by the worker's personal attributes and the job's characteristics. Then, using a very complex mathematical method, he arrived at results to support his beliefs.

Buchele's study is based on interviews with a group of out-of-school men, between the ages of 25 and 27 in 1969.

It sought to answer the question, "All other things being equal, does it matter what job in what industry an individual has, and how much does it matter?" "All other things" were 22 personal and job-related characteristics.

The measures of labor market success and failure were number of times and percent of time unemployed, percent of time not hunting a job, number of years with current employer, whether the individual was still with his last year's employer, various income measures, and job satisfaction.

The first task was to classify jobs according to (1) job content and (2) "circumstances of employment" in different industries, to test the role played by the job itself.

Job content referred to how much self-direction, self-expression, variety, and skill development were called for. Those jobs considered best involved planning and directing one's own work or the work of others. Jobs at the bottom of this list were typically routine, and closely supervised, and the holders received specific and detailed instructions or performed machine-paced tasks. Jobs from top to bottom were divided into five major groups.

1. *Professional*–very complex work without direct supervision. Includes both professionals and administrators.
2. *Supervisory*–moderate complexity, high autonomy (self-direction). Includes most remaining managers, foremen, officials, and proprietors.
3. *Craft*–moderate complexity, moderate autonomy. Includes artists, technicians, skilled craftsmen and operatives, and highly trained service personnel.
4. *Subordinate*–moderate complexity, low autonomy. Includes skilled clerical workers and sales personnel, semiskilled craftsmen and operatives, and service personnel.
5. *Menial*–low complexity, low autonomy. Includes low-level sales personnel and clerical workers, unskilled service workers, operatives, and laborers.

Depending on their industry, people are subject to quite different employment circumstances–relationships with their employer, job and income security, opportunity for advancement, pay, and fringe benefits. Some authorities characterize as "important" such industry differences as establishment size, relative amount of labor used, share of total market, sales, profit rate, and percent unionized. This study tested the proposition that differences in labor market experiences, such as employment stability and wages, actually result from such differences.

Industries were grouped accordingly:

1. *Core industries*–metal and coal mining; most durable goods (e.g., machines, autos, and railroad equipment); heavy nondurable goods (e.g., meat, tobacco, textiles, chemicals, and petroleum); water, rail, and air transportation; telephone and telegraph; and gas and electric utilities.

2. *Peripheral industries*–remaining mining; construction; remaining durable and nondurable goods manufacturing; and other transportation, communication, and public utilities.

3. *Private services*–wholesale and retail trade; finance, insurance, and real estate; business and repair services; personal services; entertainment; and professional and related services.

4. *Government services*–public administration, public education, police, fire, etc.

Blacks in the sample were generally excluded from professional and supervisory jobs, and heavily concentrated in menial jobs. However, they were represented almost in proportion to their numbers among professional government employees, probably school teachers.

Collective-bargaining coverage was most extensive in blue-collar jobs. Forty percent of the workers in the core and periphery crafts and menial occupations and in core subordinate positions were organized; 40% of government-employed professionals, mostly teachers, were also covered.

Personal and job-related characteristics were broken down into categories that included education, training, family background, current health status, geographic location, and employment circumstances.

Both industry and occupation significantly influenced unemployment rate, number of times unemployed, job turnover, worker satisfaction, natural bent toward job, and income. Both the number of spells of unemployment and the unemployment rate were twice as high in subordinate and menial occupations as in professional and supervisory jobs, after allowing for personal and job-related characteristics. Compared with core industry workers, those in peripheral industries had twice as many spells of unemployment, a 50% higher unemployment rate, 25% less job tenure, and 40% higher turnover.

Both job and personal characteristics explained differences in income. Race and marital status–rather than IQ, education, training, or experience–had the greatest influence of all the personal characteristics. Blacks earned 24% less than whites, and married men earned 26% more than single men. Employment in government services reduced earnings by 8%, and collective bargaining coverage increased them by 10%. In addition, living in a large metropolitan area raised earnings by 13%, while living in the South lowered them by 7%.

Job classification mattered, even when taking account of all personal characteristics. Not surprisingly, supervisors earned the most money, while those in menial jobs earned the least. If two individuals had exactly the same personal

characteristics, the person in a supervisory job would earn 20% more than the person in a menial job.

The results lend little support to the belief that incomes will be improved by upgrading abilities, unless jobs are also upgraded. In the three lowest occupation classes, blacks earned substantially less than whites and single men earned substantially less than married men. This difference increased with the level of the jobs, from menial to subordinate to craft occupations, making the simple policy recommendation of moving individuals up into these classifications questionable. Racial discrimination in earnings is apparent at all occupational levels and employers tend to favor married employees (whose family responsibilities possibly increase their dependence on the employer).

Workers' success would be substantially improved by moving people out of menial jobs or by moving them to core industries, expanding collective-bargaining coverage, encouraging city living, developing the South, and reducing the overall unemployment rate.

Since years of schooling are important in determining job classification, individuals can upgrade their job class by increasing their schooling. Yet the remedy to unsatisfactory work for an individual is hardly a general solution. Under any foreseeable circumstances, there are unlikely to be enough good jobs for a large influx of highly educated workers. In fact, the difference between professional and production workers' earnings is narrowing and the returns on higher education lessening.

Buchele comes up with some forceful policy recommendations. There must be strong "institutional change and job creation" if we are going to improve things. But he thinks that "there seem to be strong policy initiatives (from the academic and business communities) directed against those institutions which have developed to shield labor from the harshest consequences of the labor market." These institutions he lists as unions and public agencies enforcing minimum wage laws, and providing welfare and unemployment insurance; and he says that the attack on them, in an effort to improve the operation of the labor market, leaves labor "worse off."

The way to solve the problems of "unattractive, low-wage, unstable jobs" is to offer "stable, well-paying jobs," which give people a chance for development and talent expression. This can't be done if we take "as an article of faith" the traditional view of the beneficial effects of "labor mobility and wage competition and the associated conclusions of these assumed conditions on human welfare . . . ."

Change isn't going to occur just because the public becomes aware of the conflicts involved. Victims of the situation have to be able to demand it. "Meanwhile, the prerogatives of private ownership and control [of productivity] . . . will continue to dictate policies that foster and preserve, but rarely ameliorate . . . inequality of labor market outcomes."

Buchele's peroration comes out strongly for what he terms his "radical labor market segmentation theory," which holds that "observed labor market behavior reflects the more fundamental internal workings of the firm . . . ." It is on the job that workers confront "the unequal relations of production from which the unequal labor market outcomes arise." What's needed, he says, is an alternative to the human capital theory that will give a basis for "strategies for social change." We must know more about capitalist enterprise to learn how "the unequal social relations of the larger society are reproduced on a daily basis."

Never the Twain Shall Meet

Starting life in the secondary labor market at a low-wage job does not completely destroy the Horatio Alger legend.

If you are black, poorly educated, and have little or no job training, chances are that you are locked into unemployment or a poorly paid job with poor working conditions and a bleak outlook for improvement or even steady work. It is probably little comfort to such workers that they are almost classic examples of what manpower economists call members of the secondary labor market and that they are likely to stay there.

On the other hand, if you have had a good basic education and appropriate job training, and your job carries good pay, good working conditions, and a chance for advancement in a firm with formalized personnel practices, you are in the primary labor market. With good work habits and diligence, you can stay there with an odds-on chance to end your working life in these happy circumstances.

The dual labor market operation sketchily described above has been the object of a great deal of study by economists for nearly two decades. Predictably, there are fierce differences of opinion about its validity, its significance, and its very existence in the real world. One authority contends that there are really four markets outside the primary: the secondary, the training, the welfare, and the irregular, with the last involving about 2 out of every 5 ghetto adults and embracing hustling, pushing, and racketeering.

Most studies of dual labor markets conclude that there is not much move-

ment from secondary to primary and that the limited movement taking place is preponderantly among whites. For the most part, the two markets function side by side (or in tandem), with prime market employers not really interested in hiring from outside their own prime sources, except when labor is in very tight supply. Employers hire those who can do them the most good, given certain limitations of choice and the presence of racial prejudice.

Dr. Samuel Rosenberg set out to learn more about the secondary urban labor market (what might also be called the submerged labor market)—whether workers shifted from market to market, what caused the movement, and how they wound up in their first and present jobs. He especially wanted to find out how much shifting goes on, what the real differences are between people currently employed in the two markets, and the influence on later employment of the first full-time job after leaving school. He also concentrated on learning how workers get their first jobs, the kinds of people who move from secondary to primary jobs and the kinds who get left behind, and the traits of those who move downward.

It is noteworthy that, until Rosenberg made his study, there was little or nothing in the much-studied field that compared primary and secondary market jobs by city and at the same time set up methods by which to allocate specific occupations to each market.

The urban areas he selected were low-income neighborhoods of Brooklyn, Cleveland, Detroit, and San Francisco. The group he studied was limited to men aged 21 to 64, on whom he obtained data from the 1970 Census Employment Survey. The jobs these workers held over a long period of time were classified as primary or secondary by an intricate and quite ingenious combination of data. He measured skill requirements for the jobs represented in his sample by the amount of vocational training and general educational development levels required, using standard scales. He also related hourly earnings and degree of independent judgment needed. Jobs scoring below a certain level were deemed secondary; the remaining ones were primary.

Rosenberg analyzed his data in two ways. One was a series of cross tabulations comparing the primary and secondary jobs in the low-income areas of the four cities. Such characteristics as race, education, age, job changes, weeks worked per year, time on current job, hourly wage, and annual income are shown. The second technique employs more complex methods that bring to light the employment patterns of the persons in the two labor markets. These calculations reveal the influences that determine first job and its effect on later job history; in addition, they point to the probability of a worker of given traits moving from secondary to primary employment, and vice versa.

What he discovered is mildly surprising in a few instances, but it largely confirms what has previously been demonstrated or commonsense observation tells us must be the case.

The major revelations of his tabulations are:

1. Blacks and other minorities are disproportionately represented in secondary jobs, except (surprisingly) in Detroit.

2. Substantial numbers of whites hold secondary jobs, at least a fourth in each city and some 36% in San Francisco.

3. Secondary workers have less education than primary workers, and blacks in both groups have about the same amount of schooling as whites, except in San Francisco.

4. Secondary workers tend to be slightly younger than primary workers, and blacks in both groups are older than whites.

5. Minority group workers in 3 of the 4 cities are more likely to remain in secondary jobs than are whites. Up to 8 out of 10 workers, especially whites, who started in primary jobs were still in them at the time of the survey.

6. Although secondary workers exhibit higher turnover rates, both groups apparently have considerable job stability. (This finding questions the observation of most writers on dual labor markets, who have stressed the job instability of secondary workers.) A larger percentage of primary workers were on the job for a full year, for both blacks and whites; and primary workers had longer tenure on their current jobs, although secondary workers hung on pretty well, from about 5 years in San Francisco to nearly 10 in Detroit. Strangely, white secondary workers had shorter tenure than blacks in all cities but Brooklyn. This may result from the greater chance for upward mobility for whites.

7. Similarly, black secondary workers earn more than whites in that group, but the reverse is true of primaries. The average hourly earnings results are a mixed bag, but generally the difference in wage rates between secondary and primary workers was greater among whites than blacks. Annual earnings give a clearer and more distinctive picture and suggest that a substantial number of secondary whites in all cities but Detroit are as badly off as or worse off than their black counterparts.

The validity of these findings is clouded somewhat by the many contradictory results between cities. Rosenberg acknowledges these problems but does not explain them. He describes the difficulty he experienced with his method of classifying the occupations of his sample, and the shortcomings he relates may account for some of the anomalies that occur. For example, why should assemblers be primary workers in Detroit and Cleveland but not in Brooklyn and San Francisco? His criteria classify newsboys as primary workers in Detroit and typists as secondary in Brooklyn but primary in Detroit. Construction laborers are secondary except in Cleveland. Perhaps equally disturbing to the results is his use of 1960 job content weights and 1970 wage rate data for both first and current job. Another problem is his use of only poverty neigh-

borhoods for his sample of primary workers. But while cheerfully conceding numerous data problems, he properly points out that his study of dual labor market theory goes farther and plows more new ground than that of anyone else. Flaws there may be, but apart from a census of a population of one there is no perfect set of statistics.

When we proceed to his analysis of labor market patterns, we can feel greater assurance:

1. As expected, education had a very positive bearing on currently held primary jobs, especially for people with more than a high school diploma. Vocational training helped, but the manpower programs of the 1960's did not.

2. Migration—from another country or from the South—appeared to land people in the secondary market; this holds for blacks and some whites. But white migrants coming to Cleveland and Detroit from elsewhere were likely to be safely ensconced in primary jobs. Migrants who had been in residence for less than 5 years turned up frequently in secondary jobs, more often than those who had been in northern urban cities since age 16.

3. In a test of the influence of the first job on current labor market position, the relationship was not as strong as dual labor market analysis usually shows. Rosenberg feels that this result, coupled with the mobility tables, suggests that the two markets are not rigidly separated, and a start in a secondary job does not completely rule out living up to the Horatio Alger legend.

4. But education is very important in deciding where workers get their first jobs—more decisive than in getting the current ones. This means that work experience is more important later in working life, and ambition and hard work offer greater foreseeable chances of reward if you are already in a primary job. In secondary jobs, the pot of gold is less visible at the end of the rainbow. This is a more optimistic outlook than that of one authority Rosenberg quotes, who says that "a busboy who works hard just becomes a hard-working busboy."

5. Consequently, he is strong on vocational training to clear the golden trace to a first job in the primary class.

6. Starting a work career in the country means you are apt to start in a secondary job. The same holds true for some blacks and Spanish-speaking men who lived in the South at age 16. But blacks who first started work in the middle and late 1960's had better chances to be in primary markets than did their elders at a similar career stage. This advantage, Rosenberg feels, is being wiped out for black youth who are presently having a rough time finding work in any labor market.

7. There is some chance that education will boost a secondary worker over the barrier to a primary job, but Rosenberg surmises that reasons other than lack of education bind people to secondary jobs. Blacks have a better chance to move up if they have lived in the North for some time.

8. A lot of work experience doesn't help upward-bound ambitions, a sad conclusion that jibes with orthodox dual labor market theory.

9. The skid downward—from a primary to a secondary job—is slowed by increased education, but, oddly, not job training. Migration has little influence.

"What does all this mean?" Rosenberg asks. And here he echoes the reader's query. The answers are not extensive. He voices hope that they are coherent and confidence that they are significant.

His study does confirm the dual labor market theory, and he thinks his approach reveals characteristics that others have missed. The two markets are not two worlds discrete with never the twain meeting. They do meet, albeit often momentarily, or just come close to intermingling. He sees the secondary group as a kind of reserve labor force that moves into primary position when demand for labor is high. But many who move upward can't hold their good luck when times change. The secondary market swells with migrants from the South, Latin America, and rural areas everywhere. It employs a surprising number of whites, more than is generally supposed, and their personal characteristics are close to those of blacks. Therefore, policymakers should pay more attention to this group, and more effort should be made to help both blacks and whites get their first jobs in the primary market. How this might be accomplished is not noted, except for the recommendation that primary jobs should be created. Regrettably, regression analysis, in this instance anyway, offers no clue.

(MOFFITT)

The Two-Way Stretch

Industry's flight from the inner city to greener pastures need not doom the workers left behind to hopeless unemployment.

A great deal has been written about the flight of industry from the central cities to the suburbs, following the lure of cheaper land, lower taxes, and, one might surmise, thoughts of fresh air, flowers, and safer surroundings. This idyllic image has been clouded by some worrisome reality. What has been worrying urban analysts and other social scientists concerned with urban problems is the effect of this migration (especially of factories) on city unemployment. A pretty pat assumption seemed to be that, if the jobs left town, a lot of people were going to be left behind to face shrunken job opportunities. And the people who would suffer most would be low-skilled black workers (and workers from other ethnic groups like Chicanos and Puerto Ricans). Not only would central city jobs disappear, but effective housing segregation in the suburbs would prevent the displaced city worker from moving with the jobs.

This divorce of black workers from their jobs and the blockage of them from new chances in the suburbs is known as the mismatch theory, a not particularly happy phrase.

Dr. Robert A. Moffitt feels that researchers have not looked squarely at the mismatch problem from all angles and that much of the research on mismatch could rightfully be labeled a mish-mash.

Since considerable government effort has been devoted to helping the

"stranded" ghetto worker on the assumption that the mismatch theory is correct, it is important to find out whether this assumption is justified. So Moffitt set out to see if the decentralization of many firms to the suburbs has really limited the job opportunities and wages of blacks. While admittedly firms are moving out, he had a strong hunch that the very movement, pulling mainly white workers in its wake, would open up city jobs. If there were a strong labor supply moving to the suburbs, things might work toward a balance. And he wanted to take a sharp look at manufacturing jobs particularly.

How much of labor supply goes to the suburbs and how much remains in the city depends on the relationship of suburban wage rates to those in the central city, and also on where workers live and how they get to work. An increase in wages in one place or the other could tempt workers to change jobs, change travel practices, or change the location of their homes. To check the various possibilities, including the pattern for different industries, Moffitt made several studies based on information from various official sources. He used as many as 49 metropolitan areas in some analyses and, for different approaches, selections of 30 outside the South, the 10 largest areas, and a group of 5 areas to study differences by age, race, sex, and county of workplace. Industries studied were manufacturing; wholesale and retail trade; transportation, communication, and public utilities; and finance, service, real estate, and insurance.

He studied the extent of residential changes, variation in demand for products and services, and the effect these had on wage levels for a decade. He expected more employment growth and demand in the suburbs than in the central cities. And so it turned out. The difference was most pronounced for employment gains in the finance-insurance group. Manufacturing employment growth was the slowest. Whites went to the suburbs at a rate 20 times that for blacks. But when you separate whites and blacks by level of education, you find that the better educated blacks went to the suburbs at a much faster rate than did whites who had the same amount of schooling.

What happened to wages as a result of the shifts in labor supply between central cities and suburbs during the 10 years underpins much of what Moffitt believed from the outset. In manufacturing, central-city wages grew faster than those in the outer areas. Even when he separated out for special study the largest areas (often used to "prove" the mismatch theory), the ratio of central-city to suburban annual wages rose in 8 of the 10 metropolitan areas (falling only in Philadelphia and Houston).

Generally, people holding to the mismatch theory conclude that blacks cannot follow the moves of high-skill factory jobs out of the central city. Yet when we review the information for geographic and industry changes between 1960 and 1970, we find that, in the four industry groups, blacks changed from inner-city to suburban jobs at a higher rate than did whites. And blacks

who changed industry in the move were likely to go to work at high-skill factory jobs, although near a fifth went to low-skill factory work. Moffitt's study also suggests that suburban wages are highest for whites in the wholesale-retail jobs and in finance and service groups. For blacks, suburban wages for high-skill factory work, as a percent of central-city wages for comparable work, were greater than for whites. He puts a damper on drawing pat conclusions from these findings because he feels the information lacks the refinement that unavailable data on education and place of residence could furnish.

In all four industry groups, decentralizing the workplace was strongly related to suburban moves. For example, in manufacturing a 1% trek of individual workers to the suburbs followed a 1.19% move of the workplace to the suburbs. This, Moffitt contends, "constitutes firm evidence that suburbanizing residents often change workplace to the suburbs, thus opening up city jobs" for those staying downtown. It also, he feels, erases the picture we have of the worker who moves to the suburb only to commute right back to the city, a picture that influences—unfortunately, he says—much of our urban policy. And the fact that factory wages in the central city rose at a faster rate than in the suburb from 1960 to 1970 is another blow to the mismatch theory; it happened because of a very simple fact: decentralized labor supply was greater than demand.

Moffitt thinks he has turned up pretty strong evidence of chances for job and wage improvement in central cities, especially in manufacturing, in the face of, and because of, the outward movement of people following work. Because of this, the policies that flow from the mismatch theory (subsidizing transportation and moving blacks to the suburbs) should receive less attention than they have. Instead, society should make an effort to improve "the ability of city blacks to *obtain* the city jobs that are *available*." Therein lies an important avenue to black-white economic equality.

Proof of the Pudding

Unions will support the training programs that don't threaten the job security of the rank and file members.

A very good question to explore is how labor unions feel about employment and training programs. Dr. David B. Stephens set out to do just that. He selected two unions, the International Union of Operating Engineers (IUOE) and the United Steelworkers of America (USA). The IUOE is a representative and dominant craft union in the construction field and the USA, a powerful and fairly typical industrial union. Both have had considerable experience with employment and training programs, which means that they came into the act early, when the ancestors of today's Federal programs were born in the early 1960's. They still were actively interested in federally financed projects in the 1970's.

It was to be expected that the objectives and approaches of the two unions would differ in regard to employment and training. They did. A number of pressing needs motivated the IUOE in the 1960's, when Federal job training efforts were being developed. It wanted to operate a national apprenticeship program because it was under fire from the National Labor Relations Board to do so or lose its status as a craft; it had members who hadn't kept up with the shifts in skill demands in construction; it had a reputation as a racist organization that could not only get it bad publicity but lose it jobs as well; it had a murky public image because of a U.S. Senate investigation into racketeering, and this needed to be cleared up to bolster its position and prestige.

The union would have had to cope with all of these problems, even in the absence of any Federal training programs, but participation in and support of the programs at least partially helped to bring a happy ending to each of the problems. One tangible result was that the union treasury was spared huge expenditures for high-cost training with very expensive construction machines and equipment. In short, the IUOE learned to relate its own needs to program opportunities.

In contrast, industrial unions like the USA cannot maintain the tight control over labor supply in the manner of a craft union. They operate in a situation wherein management controls hiring and, for the most part, training, mostly on the job, and wherein the minority restrictions by and large don't exist, according to Stephens. There is in steel an elaborate internal labor market, and the union is concerned with protecting seniority and advancing wages. The USA was receptive to employment and training programs, provided only that seniority systems were kept intact and assistance for the disadvantaged limited to entry-level jobs. Foreign competition in the steel market and unemployment caused by automation and increased productivity were major problems. The plight of members thus thrown out of work made retraining programs attractive. Moreover, the programs gave the union a chance to make good on its general policy of supporting social betterment, including its strong stand on civil rights. As with the Operating Engineers, the Steelworkers accept and participate because such action does them practical good; ideological reasons are an influence only with the USA, and a minor one at that.

Stephens, after a study of all the literature he could lay his hands on about the two unions and their relation to the programs, set out on a series of interviews with union leaders. He talked to 24 IUOE and 26 USA officials. Six of the Operating Engineers and five of the Steelworkers were national officers. Geographically, the IUOE local unions selected were in Phoenix, Washington, D.C., Atlanta, Cleveland, Philadelphia, and Chattanooga. From the USA, he selected local and district leaders in the Pittsburgh and Detroit areas, Birmingham, Baltimore, East Chicago, Canton, Ohio, and Houston. He asked a multitude of questions to search out their experiences with and opinions about Government-sponsored job training with which the unions were concerned, along with their present attitudes and the policy recommendations they would make for the future.

The Operating Engineers Union was heavily into training programs in 1963-74, when it received a total of $20 million in Federal funds for training about 10,000 persons. Most of the programs had to do with three types of training: Upgrading current members; giving new trainees fairly brief instruction on equipment as a kind of prelude to a formal apprenticeship program (although the trainee could qualify for some equipment work even without

the apprenticeship); and instructing Job Corps enrollees, who learned heavy equipment for a year and then either went into full apprenticeship training or, as full union members, were sent out to jobs calling for equipment they mastered while in the Corps.

International officers interviewed strongly emphasized that the union's problems (listed earlier) had pushed it into so massive a program. They also said that the leadership felt a sense of social responsibility in accepting minority trainees. They weren't worried about any risk that participation in Federal training activity might result in Government interference or control of their internal affairs. After all, if things got sticky, they could always say goodbye to the relationship.

Although the international officers said that they used no pressure on the locals to accept training programs, the local officers had a different viewpoint. Most of those interviewed indicated that they went into the training business because they "got the message" that the international wanted the programs adopted. But there was general agreement that the local membership needed upgrading to make them more versatile and thus more employable. Apparently the sense of social obligation of the national leaders didn't trickle down much to the local level, according to Stephens' findings. Certainly and logically, the top officers were the prime movers, because, given the burning need for an apprenticeship program, there had to be a centralized and uniform plan.

What about problems in operating the programs? Here there was a basic difference between national and local viewpoints. The national officers reported no serious difficulties. Of course, their job was to negotiate the contracts with the Manpower Administration and not to bother with daily operations except in the Job Corps centers. Stephens also suggests that they may have been a bit coy about admitting unsolved problems to him.

But leaders at the local operational level made up for the recital of tranquility. A matter that particularly bugged the local people was the work habits of the disadvantaged. A high percentage of local leaders reported slovenly work habits, inability to learn, and a propensity for theft, vandalism, and drug and alcohol abuse. The IUOE operates hiring halls for employers and is responsible for both training and placement, and thus this substandard deportment was especially vexing.

Was there any solution? There were efforts. First, most of the local leaders tried a relaxation of standards. Then they tried to stimulate the trainees by patient talk and demonstration of the benefits of a good training session. Finally, they put pressure on and threatened removal from the program, but this was seldom necessary because the most deviant persons soon dropped out of their own accord. In the leaders' opinion, from 25 to 40% of the trainees were inadequate. More effective screening at the outset was a help,

but the problem of work habits was partially sidestepped rather than solved. Undesirable work habits also caused problems on the job.

Problems of a somewhat similar nature plagued the upgrading programs for current members, too, but these tended to take place only during training and not on the job. More than a quarter of the local leaders said there were difficulties in placing the upgraded worker after completion of training, so it may be, Stephens surmises, that regular members don't take training seriously. Talking it out seemed to be the prevailing solution. Problems or not, and solutions or not, about 8 out of every 10 workers who entered upgrade training finished the program.

There were a number of problems not directly related to trainees and their work habits—lack of good instructors, insufficient course time, and shortage of training equipment, which is heavy construction machinery and very costly. Some of these have been solved or at least partially relieved. Discrimination charges were reported by some locals, and the effect on the locals was to dash cold water on any enthusiasm or tolerance for programs for the disadvantaged. Stephens points out that the solution to the placement and personality problems of the disadvantaged "seems to be out of the union's control." This fact, he adds, "will not make them go away," and their continuance "indicates that improvements in program design should be considered." When members argued that efforts to solve the placement problems of the trainees conflicted with labor-management contracts, it was found that even-handed and rigorous adherence to the agreement was all that was required to contain grievances. "The time for tolerance," Stephens emphasizes, "is probably during training," and after that, both unions and employers agreed, the sanctity of the contract must prevail. This attitude apparently "prevented numerous potential conflicts . . . ."

The attitudes of the local and national leadership toward training programs could be summarized thus: National leaders are more keen on the whole idea than are local officers, who know that the rank and file members aren't enchanted. Although local leaders feel that special treatment for the disadvantaged is repugnant to their outlook, most concede that special treatment has taken place. All leaders see the union as the proper agent for training, especially when funds come from public sources.

Of course, there were proposals for improvement, and the desire for more funds led all the rest. Among other suggestions were limiting training to upgrading, stimulating demand for construction labor so that training would make economic sense, and establishing local contracts rather than a single national one. Stephens concludes that the IUOE leadership is "a special interest group" and will not "readily sacrifice [its] own interests for the disadvantaged or society as a whole . . . ." He also concludes that, given the size of the construction industry and the growth pattern of the union, the training

program has caused hardly more than a ripple in the labor market. If in the future the character of employment and training programs changes in a way "to threaten the union's position or to . . . neutralize the positive effects," the union will drop the programs like a hot potato.

And as to the Steelworkers: The union's interest began in the Area Redevelopment days (1961). After all, a lot of its members were in depressed areas. It gave its blessing to programs operating under the AFL-CIO Appalachian Council. Interest continued under the AFL-CIO Human Resources Development Institute and the National Alliance of Businessmen's Job Opportunities in the Business Sector (NAB-JOBS). But it was a direct sponsor of a training arrangement under the Manpower Development and Training Act, for a 3-year stint only, beginning in 1967.

Stephens concludes from his discussions with national officers that they at first had great hope for positive benefits from manpower programs as an aid to solving the displacement problem and helping poorly educated members. But they felt that these needs were not met. To them, the whole system was geared to craft rather than industrial union training objectives. The emphasis on skill training, the shift of Government policy toward aiding the unemployed and disadvantaged through local funding and planning under the Comprehensive Employment and Training Act, and the dominant role of steel company employers in both hiring and training made it doubtful that the national leadership of the USA would "actively seek additional involvement with Federal manpower programs in the near future" unless there is the unlikely occurrence of a labor shortage in the steel industry. It appears to Stephens that the objective of the union's national leadership has undergone a double switch from active sponsorship to a collective-bargaining approach to a "third party" monitoring role in the interest of members' welfare and protection. National officers got in for economic reasons, saw no real benefit, and got out, leaving to management its training, upgrading, and hiring prerogatives. Any union interest in employment and training, they thought, should be matters of concern to the locals.

At the local level, two-thirds of the leaders thought that the rank and file had generated quite a bit of steam for basic education, and an even greater proportion figured that the union, whether willing or not, was involved in the employer-directed NAB-JOBS Programs. But an industrial union, according to Stephens, "is not particularly interested in controlling labor supply or in conducting skill programs . . . ." So long as it is not too harassed by job displacement or contract violations, it can ignore employment and training programs. The leadership of the districts and locals were miffed because of what they felt was violation of contract provisions by favoring trainees over employed rank and file. At the same time, they complained that some enrollees were being deprived of certain rights provided by the contract. There

was a feeling that national leaders along with the companies were not responsive to the strong, continuing demand for basic education. Working through the normal grievance procedure, the union has handled fairly well the contract violations regarding rights of both old members and the new training program workers. Looking at the problems from a respectably objective distance, Stephens calls the problems few in number, minor in degree, fairly easy of resolution over time, and compatible with the collective-bargaining system. Only the feeling that "we've been left out of it" remains.

If you question leaders on what they really feel about training matters, it comes out about like this: three-fourths believe in union sponsorship of programs; almost the same proportion want the union to receive funds from the Government to train the disadvantaged, and a whopping 90% want separate Government funds to train rank and file members for upgrading. In short, the leaders want union control. Yet almost all agreed that private employers should participate in training and Federal funds should be used for special training of the disadvantaged.

Nevertheless, there seems to be, in Stephens' words, "an obvious difference between their desire for the programs and their enthusiasm concerning program success." There is no widespread belief that the programs can really increase employability or that the quality of the training is good; and the farther you go up the leadership scale, the less optimism there is. Stephens believes that this attitude reflects a bias generated by top leadership's sense of playing only minor roles in the programs.

There is general sentiment against special treatment for the disadvantaged, stronger among the national leaders than farther down the scale. All in all, the leaders want the union to accept Government funds and sponsor training, but even more they want employers to do so, especially at the entry level. The membership is neutral toward employment and training efforts, in the opinion of the leaders, except when seniority rules are violated and when there is fear of a trained labor surplus or apprehension that recruitment of the disadvantaged at the entry level will dilute the quality of the steel labor force. On the whole, the negative viewpoints within the union are, in Stephens' view, caused by the shifting goals of manpower policy over the years.

How would the union's leaders change policy? There is no common objective. Almost half want an expanded union role. About a fourth would rerun the basic education program. Another fourth think local CETA planning councils should have more union members. Equal proportions (15%) call for better screening, more active national leadership participation, programs designed for distinctive local needs, and removal of the union from handling Federal funds. These proposals, according to Stephens, show that the union's leaders are not concerned over the unilateral administration of programs by management. Their real concern is that the programs could reduce the quality

of the work force. "Therefore, the companies have increased their institutional power while the union has not." Why not carve out a new role for the union in employment and training administration? Stephens asks. A slight shift in program design could handle this. Otherwise, what is the point of soliciting union support for a program that does not directly help the union?

The proposal for "more careful screening" is the key to a major problem irritating the members. It relates to the same problem of work habits and attitudes of the disadvantaged that beset the IUOE. "This concern merely underscores the fact that the on-the-job behavior of the disadvantaged . . . still does not measure up to accepted norms." Hence the local leaders, caught by the necessity of defending these trainees for conduct that is indefensible, want stricter screening and prework training in work habits. Stephens emphasizes that this proposal does not flow from race discrimination, because the union has had long and generally proper relations with a sizable minority membership.

There is little evidence that social and political outlooks counted for much in the union's relationship with Federal training programs. A practical, pragmatic approach prevailed, and its main purpose was to protect the economic welfare of the members. Whatever faith the union had in theories of labor supply, Stephens comments, "regardless of the reliability of such theory, it has not been a major factor in shaping the union's response to manpower policy." National leaders have commented (although their opinion has not been sent down the line) that, in the future, training programs will stem from specific shortages of skills in specific areas. Further, fundamental education will be happily accepted, but at the local level. Nationwide programs aren't in the cards, "although the concept will be agreed upon nationally, presumably in the collective-bargaining agreement." So the union will continue its "watchman" role. Stephens feels that the union isn't showing much enthusiasm for programs because it hasn't gotten much mileage from them in the past. It is saying to the Government, "Gear yourself to fit our machine and we will mesh with you."

Stephens concludes that employment and training programs can be usefully operated for both craft and industrial unions. For craft unions, you can expect the best results from the programs if there are shifting and growing skill demands, no conflicts with leadership or rank and file interests, overall union needs in addition to bettering job prospects of members, and emphasis on upgrading rather than training the disadvantaged. For industrial unions, efficiency results if upgrading takes priority over help for the disadvantaged, if there is a shifting demand for skills, if programs for the disadvantaged are adjusted to employers' preferences and do not fight the union's seniority system, and if the AFL-CIO handles employment and training matters, save when the union has a pressing and special need.

He offers four general no-noes for policymakers:

1. Don't fund programs where there is no real need for them. Be sure there is a crying need for additional labor. Otherwise, you will create some difficult problems for the union—and also waste money.

2. Don't go counter to the interests of the union, and take care to guard its institutional power and the security of the rank and file. Otherwise, you won't get cooperation.

3. Don't offer training to the disadvantaged unless you first or at the same time make upgrading and retraining available to the rank and file.

4. Don't support programs that call for special treatment of the trainee. This is dynamite. You will run into trouble.

Counterpoint in Construction

I. Follow the Leader

Centralized bargaining can be one important way to achieve wage stabilization in the construction industry.

The level of unionized construction workers' wages, like the weather, is a subject of seasonal and sometimes bitter comment. People who are not construction workers complain that their rates are sky-high and that they are paid for a lot of wasted time. Jokes about plumbers going back to the shop for tools and bricklayers making more than bankers are decades old. Construction workers' unions, on the other hand, point out that hourly rates do not necessarily mean high annual earnings. The work year for the construction wage earner may be seasonally or otherwise interrupted, and the industry reacts very quickly to depressed economic conditions. Moreover, the output per manhour in the U.S. construction industry is the highest in the world. Anyone who has watched British masons might be inclined to agree.

In recent years, collective bargaining by construction unions has been a political issue. Bills have been introduced in Congress which, in part, would give national unions substantial control over local contracts and set up a wage stabilization mechanism at the national level. Such a measure was vetoed by President Ford, and a similar bill failed to pass the House of Representatives in 1977.

Dr. Clark G. Ross offers good reasons for public concern over construction wages and how they are set. Construction work makes up between 10 and 15% of all the goods and services the Nation produces and employs about

1 out of every 20 persons in the labor force. Changes in the volume and price of construction can influence the entire economy. Hourly earnings in unionized construction rose 91% in the decade between 1960 and 1970, compared with about 71% for organized factory workers. Construction activity (especially in housing) is an indicator of social well being, and because construction wages are a huge hunk of the total bill (25%), a whopping wage increase could price most people right out of the housing market. (Housing construction, however, is the least organized part of the industry.)

Before anyone can even think intelligently about the problems of construction labor costs, let alone do anything, it is necessary to unravel the complicated influences and relationships that beset the way construction wages are arrived at.

Construction unions ordinarily bargain locally. The locals represent 20 crafts organized by 19 international unions. Hence hundreds of locals handle bargaining for each craft, and the crafts are limited strictly by type of work, quarreling frequently over which union does which work in a given situation. International unions may advise, but local autonomy is pretty much the practice. The contract usually covers a specific geographic area, typically for 2 years. Naturally, there is a good deal of intercraft influence in setting the terms of a contract, and certain relationships among rates of the several crafts have been set over the years.

In addition to the system of bargaining and craft relationships, many other factors enter into setting wage levels in construction, as in all other industries. Some are available labor supply, productivity, demand for product, living costs, and the effectiveness of strikes or strike threats. But in construction more than elsewhere, there is the wary and jealous eye individual union members keep on the wage rates won by companion crafts, which leads to a sort of stump the leader rivalry. Moreover, a given craft tends to be influenced by the craft's settlement in another area. One departure from normal procedure has been taken by the International Brotherhood of Electrical Workers with the formation of the Council of Industrial Relations (CIR), which governs most electrical contracting industry collective bargaining across the Nation. It is made up of equal numbers of union and contractor members, who have authority to make final settlements if negotiations reach dead center at the local level. In effect, this machinery does away with strike action and can and does directly influence settlements for the Electricians and indirectly those of other crafts. It may well be a model for stabilizing bargaining and wage and benefit settlements in the whole industry.

Ross's study attempts to isolate many of the factors that influence wage-rate setting and fringe benefits in the industry and to suggest some things that might stabilize and improve future labor relations and collective bargaining.

He selected three crafts—electricians, iron workers, and plumbers—for

study in 20 large cities, well distributed around the country. He obtained information on average hourly wage rates (including benefits) for each craft in each city during each year between 1960 and 1971. Thus he had 10 observations per craft in each city, or a total of 600. Selection of the crafts was based on large membership, highly skilled work, widespread use in heavy construction, and dependence on one another on the job. In addition, electricians, often bargaining rivals of the plumbers and iron workers, operated under the restraining hand of the Council of Industrial Relations, which had the effect of limiting strikes; hence the inclusion of the Electricians Union allowed study of any effect the Council's presence had on settlement size. Seven cities were in the East, two in the South, eight in the Midwest, and three on the West Coast. Availability of data was most important in choosing particular cities.

This study is a pretty complicated business, and what follows is an oversimplified description of its objectives. What Ross set out to do was to measure the effect of economic conditions, of one craft on another (what he terms interdependency), and of one geographic area on another, by time period, craft alone, and other relationships. Against some of these factors, he measured the influence on settlements of the Consumer Price Index (CPI), strike activity, unemployment, and market demand. He studied many other relationships—too numerous even to mention briefly. All are the basic ingredients of careful research—and the many interrelated results can be revealed only by intricate computer operations.

The main findings follow.

Looking at all 600 results—three crafts in 20 cities in each of 10 years—we find that the price index, unemployment rate, and the strike activity showed up as influences that bore importantly on a craft's wage rate settlement. Prices proved to be very important. Industry market demand didn't show up as very significant, although Ross wasn't too confident in this finding. When crafts were studied separately, demand for labor was important in the case of electricians; but the strike record was plainly an influence for plumbers and iron workers, indicating that the electricians' dispute settlement arrangement worked effectively, and suggesting that they may have been getting a free ride.

Considering time periods during the decade under review, Ross identified a shift in settlement determining factors in 1967. Both the CPI and the incidence of strikes rose, the latter responding to high employment and expectations of strong construction demand after 1967, and wage levels rose as a result. Strike action was common and lengthy in that period. It is probable that settlements achieved in that period by the three crafts had a ripple effect on others, even after the heated up economy cooled a bit, because of the persistent practice of the game of catchup.

Taken as a whole, the crafts showed a kind of round-robin effect in settle-

ments. Electricians appeared to be influenced by the iron workers and plumbers, the iron workers by the plumbers, and the plumbers by the electricians. When Ross also considered geographic area, he found that electricians responded to their counterparts in other cities. Again the CIR may be responsible by using past settlements in other cities as a model.

The following bargaining sequence for the three crafts over a 4-year period is consistent with the findings.

First year: Large increases for plumbers and iron workers.

Second year: First-year increases transmitted to extra large raises for electricians.

Third year: Plumbers get increase to match electricians.

Fourth year: Electricians and iron workers match third-year increase of plumbers.

And so on into succeeding years, in a process that in time can affect all 20 crafts, even if economic conditions become unfavorable.

Ross suggests that wage stabilization in construction really is a problem less related to living cost changes than to wage interdependencies, even in a period of rising prices. Because wage relationships among crafts and from city to city are so influential, it is the structure of bargaining that furnishes the key to future wage stabilization. Wage interdependencies seem to prevail, especially in good times. For example, in a period of good times, wage settlements for electricians are raised by about 3% if previously the iron workers and plumbers got 8%; but electricians would get only about 1% if the other two had received 3%.

But when considering the extent and importance of wage interdependency in establishing rate levels, the study emphasizes that there are considerable differences in wage structures among cities. Region of the country, size of city, degree of union organization, and the influence of residential construction (relatively less organized) all had their effect on the differences. In the East, for example, the CPI was very important; in the Midwest, labor demand and wage interdependencies were more influential. Obviously, strike activity was a frequently successful weapon in strongly organized cities. If there was relatively little nonresidential work in a city, the CPI was a heavy influence.

Boiling it all down, Ross finds that the manner and extent of bargaining and wage changes in unionized construction are pretty complex, caught up in a tangle of interarea and market influences and the drive of the various crafts to equal or better each other's victories. He time and again points to the CIR and its success in achieving wage rates for electricians that match or better those for the other crafts, without much costly strike activity. But he hesitates to suggest CIR's for all crafts because they might make wage interdependencies even stronger.

What's to be done about collective bargaining in the industry and the flow

of wage settlements? Ross thinks a change has to be made. He makes an interesting comparison of what construction wage increases actually were in the 1971-72 period, while under the control of the Construction Industry Stabilization Committee (CISC), and what they would have been without the CISC acting to cool things down. The CISC was a tripartite Federal Government group set up by Executive order in 1971 to put the lid on rising construction labor costs. It had to approve all increases and adjust settlements that seemed out of line.

Ross found that actual average increases the Committee granted for the three crafts were from 40 to 60 % less than his best model showed they would have been without controls. Indeed, after the industry was released from wage controls, average increases for the electricians and plumbers jumped right back to jibe with the Ross prediction model.

Assuming an unregulated industry, Ross thinks some stabilization can be achieved by moving toward centralized bargaining to cut down the power of craft interdependence and leapfrogging. Broadening the geographic and craft scope of bargaining would help by cutting down the number of settlements and removing some of the envy and temptations that comparisons induce. But he does not provide the all important "how." In addition to the difficulty of overcoming vested interests in local autonomy, there would be the problem of getting local contractors to suppress their widely differing and competitive interests.

Ross places some hope in legislation that embodies the collective-bargaining restraints found in the ill-fated Construction Industry Collective Bargaining Act mentioned at the outset. This would give national unions and contractors' associations power to intervene in local bargaining situations, and it would set up a committee with authority to stop strike action for up to 30 days. Strike action, as Ross's study shows, tends directly to raise the amount of a settlement and indirectly to influence the level of settlements by other crafts in the same or different areas. Still, the nature of bargaining would not be changed, although the level of wages might be lower. For wages to continue to rise through strikes and emulation, he feels, "would be inconsistent with stable growth of construction activity and employment."

II. Licensed to Limit

The exceptional rise of wages in the construction industry is due to market conditions rather than strikes.

Although the general reader may ask what else is new, it turns out that two experts can't even come close to agreeing on what is most important in causing changes in construction wage rates.

At about the time Dr. Ross submitted his thesis (December 1975), Dr. Jeffrey M. Perloff was close to his submission date (August 1976). Both had the same subject: wage changes in the construction industry. They were almost next-door neighbors (Ross at Boston College, Perloff at Massachusetts Institute of Technology). There is no evidence in their dissertations, however, that they consulted each other. They come to mighty different conclusions. You might say they play the same game in different leagues.

Both draw conclusions from the activities of three unions. Two of the unions—Electricians and Plumbers—are the same, but Ross uses Iron Workers for his third, Perloff, Laborers. Ross considers the Electricians' Council of Industrial Relations a significant stabilizing influence; Perloff ignores the council. Ross views the Construction Industry Stabilization Committee as a force for wage restraint. Perloff concludes that its effect was to increase wages. Ross credits strikes with raising wage levels. Perloff minimizes their influence.

The orchestration of this counterpoint could be continued, citing large and small differences of methods and conclusions. In the main, Ross shows that interunion wage relationships are the touchstone of wage rate changes and

that stabilization can be aided by broadening the bargaining units and reducing the practice of stump the leader in settlements. Perloff contends that wage changes flow principally from market conditions and not from the structure of bargaining; moreover, he places great emphasis on the control of labor supply by unions through "hiring halls" and their influence on licensing boards and building codes.

Wages in the construction industry are heavily influenced by general market conditions both within the construction industry and outside it. When the market conditions are thrown out of kilter, various adjustments operate to put things aright. In bad times, hiring favors only the top-quality workers, and other workers, normally with construction jobs, seek work in other fields. When times are better, they return. Thus you have quality shifts and movements in and out of the industry. Wage rate changes also reflect market conditions. Perloff relates that, under certain business conditions, local unions are flexible about skill rates and in overlooking trade jurisdictions. Skilled workers have less unemployment than other workers because they are the last to be fired. But nonwhite members (allowing for skill) have from 10 to 20 percent greater chance of being unemployed.

Collective bargaining decides which adjustments to market conditions get priority. Union monopoly is enhanced by control of labor supply through hiring halls, and Perloff contends, by such legal devices as the Davis-Bacon Act (which requires the prevailing wage, generally the union scale, on Federal contracts), licensing boards, and building codes, which he believes exists to bolster union ability to control the number of construction workers in a given political jurisdiction.

The inordinate rise in construction wage rates in the late 1960's resulted in the main from market conditions outside construction, Perloff argues, and such factors as craft interdependency, strikes, and living costs receive short shrift in his study. In fact, Perloff downgrades the influence of strikes in terms that are likely to raise the eyebrows, if not the hackles, of construction contractors and to send labor economists to the ramparts.

> Generally, strikes in the construction industry are used to correct some local, nonwage-related grievance or to reestablish the union's existing monopoly power. There is no strong reason to believe that strikes can, by themselves, increase monopoly power. At most they can demonstrate that the union possesses such power . . . .

Perloff made a detailed and professionally sophisticated analysis of what factors influence wage changes for three construction occupations; laborers, plumbers, and electricians. He picked the two skilled crafts because they are

usually licensed and the limiting effect of licensing on labor supply and control could be isolated; he included laborers because they are never licensed, and hence their reaction to market conditions is "purer" and more direct. The study used annual figures for 1967 through 1974 on a wide variety of data in addition to wages for construction and manufacturing, including employment and unemployment, prices and quantity of construction, occupational licensing, bank rates on loans, and others. He used data on 18 metropolitan areas for the 8 years and thus had 144 observations.

A major eye opener was the finding that the situation in manufacturing had a major effect on construction wages. About half the increase for laborers resulted from increases in factory workers' wages and another 30% from rising productivity; increases in the prices of construction accounted for 15%.

Among plumbers, he found that, in cities with no licensing laws, holding other factors constant, wages rise only a tenth as much as the prices of construction; in cities with licensing, the increase in plumbers' wages equals about a third of the rise in prices. In the absence of licensing, plumbers move almost at will between cities and industries when conditions in construction warrant job shifts. But licenses act as a damper on mobility and outside influences.

The findings on electricians were similar. With no licensing, their wages reflected the level of wages outside the industry.

A notable conclusion was reached in regard to the clout of the Construction Industry Stabilization Committee in 1972 through 1974. Perloff feels that "if anything, the effect of the CISC was to increase wages during this period . . . the CISC was apparently more interested in strengthening the internationals than in regulating wages." The possible influence of the Electricians Union's Council of Industrial Relations on wages, given so much emphasis in the Ross study, is not mentioned. Similarly, the key-wage theory, a cornerstone of the Ross analysis, is lightly brushed aside. The theory, Perloff states, "has not been formulated as a rigorous, testable model; . . . most versions are vague enough to be consistent with any observed behavior."

Perloff's hard line on the importance of licensing laws in restricting employment, and therefore on wage levels, in the industry is bolstered by a mail survey he made in 1975. He queried all 50 States and 153 of the largest cities concerning the licensing of plumbers and electricians. Although only 89 cities and 38 States replied, he filled in some of the missing data from other sources.

He concluded that the licensing laws were very restrictive and were designed more to bar entry into the trades than to protect the public welfare. Even where licensing boards have the power to do so, they are not likely to remove the licenses of incompetent or dishonest workers. But State boards have a better performance record than city or county bodies.

In some localities, eligibility requirements for a license include a set age; local residency; experience, training, or apprenticeship (in some cases all

three); recommendation by a licensed member of the craft; union membership (in a very few instances); written and performance tests; and U.S. citizenship. Perloff holds that some restrictive requirements effectively bar blacks and other ethnic groups. Substantial fees and training costs also work against access to a skilled job.

Once a board issues a license, it does little to weed out crooks and incompetents. At least a fifth of the city boards have no power to do so, and half the States can't touch an electrician's license. Few boards remove as many as two licenses a year, and half do not cancel a single one. But Perloff thinks that the yen for enforcement action varies with the demand for labor. Even though many codes are based on a national model law, few jurisdictions honor each other's licenses. Perloff believes "unions' control of many State legislatures" will make for rough sledding in any reform attempt, in either the direction of breaking monopoly power or eliminating licensing laws.

Marching Order

Which is the better approach to raising and maintaining the armed forces of the country: conscription or all-volunteer?

If this were a perfect world, Dr. Glenn A. Withers muses at the outset of his dissertation, there would be no wars and no need for armies. But we are woefully imperfect all around the globe. Even the nations most ardently seeking peace feel compelled to maintain standing military forces. Given this situation, the question Withers seeks to answer for the United States is how standing military forces might be most effectively and equitably raised, with special emphasis on the use of conscription.

In an absolute monarchy or other form of dictatorship, the niceties of equity pose no problem. Witness the mobilization order issued by Emperor Haile Selassie of Ethiopia at the the time of the Italian invasion in 1935:

> Every one will now be mobilized, and all boys old enough to carry a spear will be sent to Addis Ababa. Married men will take wives to carry and cook. Those without wives will taken any woman without a husband. Any one found at home after receipt of this order will be hanged.

Simple, direct universal conscription with no ifs, ands, or buts. In the United States (and in Australia, which is included in the study because, among other reasons, it has conducted plebiscites on conscription), there are

grave social, political, and economic concerns in connection with the raising of either volunteer or conscripted armed forces. Over 7% of the gross national product of the United States is devoted to defense expenditures, and the military employs a labor force exceeded by those of only six States.

Military forces are certainly affected by supply and demand but by no means in the usual sense of the terms commonplace in commercial exchange. Demand for military labor isn't a response by private producers to individual consumer demand for the product of that labor. It comes about because government officials seek to meet the Nation's defense needs, as determined by political situations. Supply likewise does not have a "true" market basis. Pay and the training and deployment of labor are governed by set rules, and market prices don't dominate the picture. Military service is not a free market because the employee surely can't leave at will. Even at the "hiring"point, there isn't necessarily a free market because of the possibility of conscription.

In looking over various methods used to raise military forces, Withers confines his attention to peacetime and limited-war manpower needs and to the experiences of the United States and Australia, with some side glances at Canada and Britain. Canada holds strongly to the all-volunteer system. Even in World War II, Canadian services were 90% volunteer. Australia twice during World War I rejected conscription by referendums and has relied mainly on volunteers. (For eight years following 1964, a lottery was used to conscript into the regular forces, but there has been ideological opposition.) In this country, there has been a longer history of conscription, which continued from 1948 to 1973 without interruption.

For a peacetime era, with no present threat of invasion or attack requiring full mobilization, which is better, compulsion or voluntarism?

It's a tricky thing to measure. As Withers notes, one body of opinion mainly among economic theorists, holds that a democratic society favors conscription because it is to the economic interest of the majority. Conscription is a nonmonetary tax imposed on the serviceman and benefiting the general taxpayer by requiring a lower general tax to finance the military needs. Withers thinks this opinion borders on nonsense, being contrary to experience and "neither substantial nor sound." The same conclusion applies to the idea that the military opposes and the civilians favor a draft.

Assuredly, the draft is not just another tax. It is forced labor, with the individual torn from normal free labor force experience and subjected to military discipline and servitude, not to mention mortal danger. A whole complex of motives influences how a person would vote on the draft issue, and pecuniary self-interest is not a major one, even though a favorite in economic analysis. The draft not only alters tax liabilities but strongly brings to bear politi-

cal, social, and philosophical interests and beliefs. This is why votes and polls on the issue have been mixed.

If a draft is not a sure-fire popular choice for a standing peacetime defense, even if there is a financial gain for most taxpayers, the feasibility of a volunteer force must be examined in the light of peacetime defense needs. Consideration has to be given to quality of personnel attracted by the two methods as well as such things as turnover, the degree to which a foundation is laid for emergency full-scale mobilization, economy of operation, substitution of mechanization, and interservice transfers of missions.

First off, Withers had to measure how much it would cost the Government to have an all-volunteer military force instead of a mixed system. This required estimating how many enlistees would come forth at various wages—in standard economic language, what would be their supply curve.

Of course, military pay is not the only item involved in enlistments. Among others are civilian wages and unemployment, preference for military life, the likelihood of being drafted anyway, and the very important matter of the entrance standards for recruits.

In the United States, surprisingly, the higher the unemployment rate, the fewer the volunteers. A 1% rise in this rate causes about three-tenths to four-tenths of a percent decrease in enlistments. One possible explanation is that as unemployment rises, those being laid off first are not acceptable material to the military and are rejected. As unemployment decreases, more people may be willing to quit jobs and investigate new careers.

Enlistments were boosted by threats of the draft, especially in the Army, with its comparatively short enlistment period. Here a 1% increase in the draft caused from two-tenths to over four-tenths of a percent rise in the number of volunteers. But this resulted in much less influence than other surveys, which showed about one-third of military enlistees saying that the draft had persuaded them to join.

Since these surveys were made before the 1968 Tet Offensive, public opposition to the Vietnam war had not yet really developed. Patriotism and adventurism therefore joined to encourage enlistment; most people still had positive feelings about the military.

Civilian pay relative to military pay was, as expected, an important factor. A 1% rise in this ratio caused anywhere from about a three-tenths of a percent to a 1.4% decrease in signups.

Now for the estimate of how much the military would have to spend on volunteers to stay in business. Withers produced this figure by taking account of all this statistical information, choosing quality acceptance and unemployment rates at their average levels over the period analyzed, setting induction levels at zero, and holding public opinion toward the military at its 1973 level. Keep in mind that an all-volunteer force stays in the service longer than

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do draftees, meaning that fewer enlistees are needed, and that fewer persons are needed to train these fewer men. For the assumed military effectiveness level, the estimated total wage cost of a mixed draft and volunteer force was $1.749 billion, while for an all-volunteer force, it was from $2.331 to $2.600 billion, depending on the ratio of first-term enlistees to career personnel.

It is pretty clear that all-volunteer forces can usually be expected to cost more in budgetary outlay than mixed forces. The savings gained from the smaller volunteer force will usually be more than offset by pay increases required to attract volunteers. In some countries the common practice has been to pay draftees less than volunteers, though this system was not adopted by the United States or Australia.

Budgetary costs do not give the whole picture, however. There are many hidden costs associated with the draft. These costs are real and significant, even if they are not paid explicitly out of taxpayers' pockets.

A volunteer force requires considerably fewer enlistments to maintain a given level of military effectiveness. Through the draft, we give up more civilian production with more people serving, without a gain in military effectiveness. For the U.S. draft prior to the Vietnam buildup, this loss of production has been estimated at $790 million.

The high turnover of a conscripted force also contributes to unemployment, from the time spent between discharge and finding a job and from the reluctance of potential employers to hire someone who may be drafted.

Individuals who are called up also suffer the loss of freedom of occupational choice. Although this loss of well being is difficult to measure, Withers estimates it to have been $1.080 billion in 1970.

Further costs involve measures to avoid or postpone being drafted. The spectrum of opportunities varies with the system, and can range from becoming a theological student to deliberately inducing medical conditions, developing minor criminal records, fleeing the country, or fathering legitimate children. Avoidance cost estimates amounted to $3 billion for a pre-Vietnam-size force as of 1964.

Young men, both by the wages necessary to induce enlistment and by avoidance actions, reveal how highly they value their freedom of occupational choice. They reveal, equally, how much loss of well being is inflicted by a draft. Indeed, the more a claim is made that an all-volunteer regular force is "too expensive" in peacetime, the more it is implied that the hidden economic costs of using a draft are large.

Some worry that an all-volunteer force will not have the expansion flexibility for large-scale mobilization. But these needs are not met by regular forces. A ready reserve system is needed for such times. The reserves could be volunteer or subject to a lottery draft, backstopped with a standby full-scale draft to meet emergencies or prolonged or major hostilities.

A draft of reserves, Withers feels, may be desirable to offset the professional and individualist values of a volunteer active duty force. In addition, the standby draft for major expansion has administrative, budgetary, and equity advantages. It could be called up quickly, with no uncertainty about the numbers mobilized, and could be paid less than a volunteer force. And equity would be promoted because all would serve or have an equal chance of serving.

For peacetime, however, the balance of advantage seems to lie with an all-volunteer recruitment for active-duty forces, particularly when there is no territorial threat to the Nation.

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Upward Reach

You'll have a better chance at building trades jobs if you have had formal training, but it may take 2 years.

Conventional wisdom says that if blacks and members of other minority groups could only receive training and counseling, they would be upward bound to greater economic security. But even when provided such supports, members of disadvantaged groups have difficulty establishing themselves in the construction trades.

Dr. Lucian B. Gatewood has examined the record of one outreach program, Recruitment and Training Program, Inc. (RTP), which since 1964 has been the apprenticeship placement arm of the Workers Defense League, a civil rights organization. "Outreach" is a term that means getting job information and related help to minorities not well-versed in the ins and outs of the labor market. RTP has grown from a single office in the Bedford-Stuyvesant section of Brooklyn to a network of 27 branches nationwide, and since 1972 has been a separate corporation and a major component of the national effort to increase minority apprenticeships in labor unions. Specifically, Gatewood studied persons placed through RTP in building crafts unions from 1967 through August 1974 to find out just what kinds of individuals had been found jobs in the industry and how well they had done.

From the outset, Gatewood was disappointed by the response to a questionnaire he mailed to the 550 individuals placed with unions in 1973-74 at RTP's Harlem, Bronx, Cleveland, and Wilmington and Durham, N.C., offices.

Only a third eventually replied. Despite this "fairly high nonresponse rate," the survey demonstrates a way to conduct such research, although Gatewood noted the inherent weakness of a lack of "a really good control group." He also used information from an RTP file on more than 9,000 construction craft placements. These dated back to 1967 when the program was a pioneering apprenticeship outreach program (AOP) implementing the National Apprenticeship Act.

When only 67 responses were received from the initial mail survey, with 152 of the questionnaires returned by the post office as undeliverable, a second mailing was made and resulted in 49 additional responses. These were later supplemented by 74 telephone interviews to achieve a 34% total response rate. Incomplete data on another 168 placements and 57 nonplacements were obtained by examination of RTP files in the two New York and the Cleveland offices.

Information from the questionnaires showed considerable overrepresentation of certain characteristics. Almost all the people placed were black or Puerto Rican, male, and between the ages of 18 and 36. More than half were married and high school graduates. These characteristics suggest a need for caution in applying the findings of the study.

Both descriptive and statistical methods were used to evaluate RTP's performance and to identify characteristics of construction trades applicants with whom it worked. Gatewood looked at the relationships between such items as the tutorial program and specific characteristics of individual participants, the direct and indirect economic effects of participation, and participants' earlier work or unemployment experiences as they related to separation or retention in the program. Characteristics studied included craft placement, age, sex, race, marital status, number of dependents, education, and amount of tutoring. In addition, the econometric study considered previous earnings and duration of employment while participating in RTP and unemployment histories of participants before, during, and after the AOP period.

The findings of extensive and careful cross-tabulations indicate that RTP has been substantially successful in placing construction journeymen, already demonstrably competent in their jobs, but less effective in placing apprentices.

The cost of the program in the timespan of the study was nearly $15.5 million, or an average of about $984 for each of 15,750 placements. Included in this cost was tutoring help for about two-thirds, other services for almost half, physical examinations for 10%, and loans for application fees or tools and equipment for another 10%.

Nearly 4 out of 10 placements were in the electromechanical crafts—electrical work, plumbing, iron work, pipefitting, sheet-metal work, and steam fitting. There was considerable variation among RTP projects. Those in the Northeast produced the largest number of placements, and Gatewood noted

that, "In addition to regional and local environmental differences with respect to labor market climates and craft employment opportunities, differences in program starting dates and activity loads appear to have accounted for program variability."

Participants reported having been well informed by the program on matters of working conditions, rates of pay, training, job opportunities, and unions; many mentioned that the program "was the most important source of advice to aid them in their decision to consider careers in the construction industry." While information was the RTP benefit mentioned most often by respondents to the survey, nearly a quarter suggested that their gain was partly psychological. "They helped me to understand that a person can be what they want to be, if they would apply theirself," one commented; Gatewood found few negative attitudes.

Of the more than 1,800 persons placed who left the program between 1966 and 1975, about 70% did so voluntarily; 16% were fired. In the 7 years studied, the completion rate was less than half. Apart from the fact that virtually all dropouts were black there was no apparent clumping of characteristics to create a profile of dropouts similar to the one for respondents to the questionnaire. Blacks, it should be noted, accounted for 84% of all placements. Reasons for voluntary separation were not specified.

Craft trainees were more likely to have completed their training as bricklayers, masons, electricians, or operating engineers than in other trades. Nearly 85% of those who completed the program were members of craft unions; such membership may be required of trainees under their indentureships. The effect on participants' hourly wages earned was not dramatic. At the time of the survey, participants did not make significantly more than those not placed until a couple of years after they completed the program, when the advantage was about $50 a week. However, the workers placed had substantially fewer weeks of unemployment than those not placed. Most dropouts returned to deadend jobs or those they had viewed as less attractive than construction work.

Overall, Gatewood found no single conclusion regarding the success of RTP possible. Where it had control over such matters as the tutorial program, recruitment of applicants from targeted populations, and placement followup, "the organization's overall performance has been quite good relative to cost per placement," he concluded. Where "the organization exercises limited power to influence the performance outcomes, such as the absolute number of construction apprenticeships and journeymen placement positions . . . its success has been less, in spite of the resources expended in pursuit of these ends. In fact, whether AOP applicants who meet prevailing admission standards are indentured to craft training programs appears to be primarily a function of . . . the prevailing employment climate in the industry and

community labor-management policies and programs to achieve increased minority participation in the crafts."

Because his results indicate that "AOP placements do not realize significantly higher earnings in the period immediately following their being indentured," Gatewood recommends that wages be subsidized for a year or two until, according to his study, those placed through the program begin to receive wages higher than those received in earlier, nonconstruction jobs. He also recommends continued funding of the RTP-AOP, with provision for additional staff in offices from which the largest number of placements are made. This would permit expansion of individual and on-the-job followup, "which may contribute to the improvement of craft completion rates," and enlargement and further analysis of RTP data files as a research resource.

Recommendations for a more general public policy are less concrete, perhaps because this research indicates that RTP has been relatively less successful in achieving overall goals than in dealing with specific individuals. Gatewood calls for "monetary and fiscal measures to promote growth in the industrial, commercial, and residential construction industries, since placement success directly hinges upon an expanding environment for craft employment and training opportunities" and for forceful reiteration of "society's opposition to employment discrimination based on race, creed, color, national origin, sex, age, and [physical] handicap." He does not make suggestions for addressing those "prevailing employment climate" factors he earlier mentioned as keys to successful placement, either in his conclusions or research recommendations. Proposed extensions of the research are focused again on the participants and their characteristics, in greater depth or over a longer period of time, rather than on unions' or employers' attitudes and behaviors.

Top Dollar Risks

Rehabilitation programs do help those who complete them, but measuring costs versus benefits is very complex.

People who pride themselves on being hard-nosed realists keep asking the questions, "How much do social services actually cost?" and "Who are the true beneficiaries?"

Dr. Robert C. Brown delved into the costs of providing vocational rehabilitation to 501 Louisianans over a 12-month period ending in March 1975 and attempted to estimate the benefit to them and to the general public. He emerged happy with the finding that benefits outweighed costs.

Since 1920, a series of Federal laws has been directed toward providing evaluation, education, therapy, and job training to prepare the physically or mentally handicapped for the labor market. Most earlier studies of the effects of the more than 50-year-old State-Federal rehabilitation program have compared the earnings of disabled persons before and after receiving supportive services and have tended to assume that any initial increase in personal income would hold throughout a person's working life.

Brown rejected this "before-after" approach and compared two similar groups of persons equally eligible to receive rehabilitation under Louisiana regulations. He also examined the earnings and the social costs of public support of one kind or another for an additional 319 persons who qualified for rehabilitation in the State but were officially designated as "unrehabilitated" because they did not complete a prescribed program.

Using a combination of information from official records and data collected by questionnaire, he examined the earnings reported for the individuals included in his study. In addition, he computed the direct costs of providing services and administering the program, the value of earnings given up while workers received training, and maintenance costs such as welfare payments. He considered as a social benefit the additional gross earnings that could be attributed to rehabilitation and took into account whether or not the job quit for rehabilitation services could easily be filled by a previously unemployed worker. He attempted to predict the lifetime effects of increased earnings attributable to rehabilitation on the basis of a year's experience rather than simply projecting them from an arbitrary point 2 months after completion of rehabilitation training and counseling.

Using standard statistical techniques, Brown calculated benefit-cost ratios from this fairly involved combination of factors for his experimental and his comparison groups, making separate calculations based on such characteristics as age, sex, ethnic background, level of previous education, urban or rural place of residence, and type of disability.

His sample was limited and possibly biased by the counselors' influence on individual programs, which often determines from the outset whether a client will succeed or fail. But he concluded that the ratios of benefits to costs were positive and relatively large for almost all clients who completed the programs designed for them. Benefit-cost ratios for various subgroups studied ranged from 0 to more than 50 and, on average, were higher than those other studies have reported for social programs.

Brown sees the apparently higher level of benefits to costs that he demonstrated as being primarily a result of the method he used to analyze his data. In many ways, his results were quite similar to those of earlier before-and-after types of studies of the effects of rehabilitation on clients and their productivity in society.

Not surprisingly, the greatest benefits, both personal and social, resulted from the officially "completed" rehabilitation of young, white, urban, married men who had at least a high school education. Concentration on provision of services to this type of client, as well as outreach to involve a higher proportion of them in rehabilitation, would obviously be one way to maintain and improve the level of benefit returns on investment in services. Brown repeatedly cautions against so simplistic a response to his research.

For example, two specific findings contradict characteristics of the composite portrait of the best risk for investing rehabilitation dollars. Women were more likely to stick it out than men, and "the combination of low benefits and even lower costs . . . result[ed] in high benefit-cost ratios for clients in rural areas." These results are inconsistent with widely accepted generalities about who will be the best bet to succeed on the job. They also support

Brown's argument that lumping all clients together in a cost-benefit study may obscure important data. There are also interesting implications for rehabilitation workers' approach to outreach, suggesting that they could profitably search out more women and rural residents. The persistence of women in completing their programs could be particularly significant, since this study showed that dropouts achieved no measurable benefits from a program started but not completed. Brown recommends that recruits to rehabilitation be informed that the higher earnings men can normally expect are associated with *completing* whatever training is undertaken.

When clients were grouped according to the nature of their disability, they also behaved fairly predictably. Those with mental and emotional problems were least likely to have profited from rehabilitation, although Brown cautions that counselors' attitudes may have set up lower expectations for these people and that the average period of rehabilitation for them was several months shorter than the overall average of more than a year. Benefits for those having other disabilities rose, in order, from those with hearing and visual problems, to those having physical ailments, to those with "other" undefined disabilities, the most successful group. The last, Brown suspects, may be less severely handicapped and certainly received an average of 6 months more of services than the study group as a whole.

Although he uncovered no startling new insights into the effects of rehabilitation on members of the various groups he studied, Brown surmised that the interaction between a vocational rehabilitation agency and the complex socioeconomic characteristics of those it serves is too intricate to permit calculation of a single level of either cost or social benefits resulting from the program. Concluding that the general effects of the program in Louisiana are both privately and socially desirable and worth what it paid for them, he recommends expansion "consistent with resources and facilities available." While it is apparent that expansion and hunting for more of the clients whose earnings and productivity are likely to result in the highest rate of return on rehabilitation dollars, he wants to see evaluation of the long-term effects of participation in rehabilitation and of the role of handicapped workers in the labor market, including employer attitudes toward handicapped workers in regard to hiring, compensation, and promotion.

Brown also concedes that other factors not so easily measured as earnings—things like the degree of disability of the individual or the psychological effects of training and counseling—should not be neglected in a comprehansive assessment of benefits. He suggests further research into noneconomic values by specialists in the appropriate fields.

Rx for M.D.s

Physician assistants can supply medical manpower in specialties and areas where they are needed the most.

If you live in a small town without a doctor and your child breaks out with a case of mysterious spots and blotches, will you sit at the nearest hospital for 4 hours, waiting to be seen by a doctor? Or travel to the nearest town with a physician? You may have another option now—one that wasn't available years ago: the physician assistant.

This new breed—born of health care necessity and an abundance of former military medical corpsmen—is moving into cities, small towns, and rural areas to fill gaps left by the inaccessibility or expense of physicians' care. Lest we assume too quickly that America's health care gap has been filled, it should be noted that there are acarcely 1,300 civilian physician assistants in the country today (versus more than 324,000 practicing physicians). A great unmet need for medical attention still remains, especially in many small towns and rural areas.

Who are the physician assistants? Where do they come from? Where do they practice? How—if at all—can they advance within their chosen field? An extensive survey was conducted recently by Dr. Henry B. Perry III, to answer some of these questions. With the cooperation of the Association of Physician Assistant Programs, Perry was able to obtain responses to his survey from 939 graduates of 32 physician assistant programs—roughly 73% of the total graduate group in 1974, when the study began.

The field is currently dominated by young men, most of whom have attended some college and received some medical training before turning to the physician assistant (PA) role. More than half have been military medical corpsmen, and a fifth have been medical technologists or technicians.

That the PA field is currently a "man's world"—over 80% male at present—is seen to be the result of early conceptions of the field, rather than current admission practices of physician assistant programs. Evidence from two studies done in the mid-1970's indicates that woman applicants to physician assistant programs are just as likely to gain entry as men; they just don't apply as often. The relative paucity of trained nurses, in particular, among physician assistant ranks may be attributable in part to increasing career options in the nursing field, including the relatively independent nurse practitioner role.
tioner role.

In the little more than a decade since programs started graduating PA's in earnest, some shifts have already occurred in the makeup of the field: there are fewer former military corpsmen and more college graduates among recent program completers. The increase in entering college grads has two important implications for the profession. First, as it attracts more academically qualified persons, its status relative to other health occupations is enhanced. Second, as more trainees enter programs with bachelor's degrees completed, some programs will shift their training from the undergraduate to the graduate level.

Eight schools offered "physician associate" programs, which are considered to offer graduates more extensive training, so as to permit them to work with greater expertise and independence in the field. The remaining programs fall in three categories: civilian and military physician assistant and MEDEX. The PA programs for civilians and those offered by the military are quite similar, consisting of a mixture of classroom and laboratory studies and practical experience. MEDEX programs are distinguished from others by their practical, on-the-job training by physician preceptors, who generally hire their own trainees following graduation.

One of the major intents in developing the physician assistant profession was to augment the supply of medical personnel in specialities and geographic areas where need was greatest. As had been hoped, nearly three-quarters of PA's have gone into some aspect of primary care—such as family practice, general practice, and general internal medicine. Another 19% have gone into surgery. This is in sharp contrast to physicians, more than half of whom are in surgery and other specialties, with 32% in specialty areas of primary care.

PA graduates are evenly split between those in private (including group) practice and those who work in institutional settings (hospitals, clinics). By contrast, nearly three-quarters of practicing physicians outside the Federal Government are in office-based, rather than hospital-based, practice.

Physician assistants are also locating, as had been hoped, in smaller communities more likely to be deficient in medical care: 73% of civilian physician assistants, compared with only 32% of physicians, are located in counties of fewer than 500,000 persons. It is outside the largest counties that one generally finds less than the national ratio of physicians per capita (1.29 per 1,000 inhabitants).

At the community level, more than half the PA's are settled in communities of fewer than 50,000 persons—and half these are in communities with populations under 10,000.

While these hoped-for trends are observed for graduates from all PA programs, MEDEX graduates are twice as likely as graduates of other civilian programs to settle in communities of fewer than 10,000 persons. This finding is not too surprising, since MEDEX programs are generally located in geographic areas containing many small communities and MEDEX trainees obtain much of their instruction from physicians—selected for their need of medical assistance—who are committed to hiring their own trainee following graduation.

Women PA's are somewhat less likely than their male counterparts to settle in smaller communities—a finding perhaps explainable in terms of married graduates' desire to seek employment in places where their husbands can also find work, and where their own working hours are likely to be shorter and more predictable.

The physician assistant puts in an average of 50 hours a week and spends the bulk of this time doing much the same work as any GP or family practitioner—diagnosis and treatment of common medical problems of ambulatory patients. Other major responsibilities listed most frequently by PA's were history taking and physical examination of ambulatory patients and emergency room care. In short, the typical PA in the study sample reports spending over 80% of his or her time on direct patient care, almost half of this performed without a supervising physician physically present. The PA takes patients' medical histories, gives them physical examinations, and diagnoses what ails them. The PA also sews up open wounds, sets broken arms, and makes the rounds of the hospital ward to visit hospitalized patients. Less routine surgical procedures and diagnosis of less common ailments are referred to physicians. As one respondent put it, his role is "a physician replacement rather than a physician extender." Another said he "functions as a general practitioner in a doctorless town."

Clearly, the physician assistant sees his or her role as quite similar to that of the doctor, in clinic, hospital, or independent practice. But how do others view the PA? Nearly a quarter of them indicated they'd had some problems gaining acceptance from the doctors and nurses they worked with—and more often from nurses than doctors. However, most of these problems were relatively minor—fewer than 5% of PA's responding saw acceptance as a major

problem. Perhaps greatest concern of PA's was insufficient support of their clinical work—nearly half felt a need for more help from their supervising physicians to improve these skills.

Patient acceptance ran about the same as that of colleagues, with roughly a quarter of the PA's patients viewed as preferring physician's attention to theirs. On a strong positive note, the PA's felt 44% of their patients would rather see a PA than a physician.

How does the PA role compare with other health professions in terms of the extrinsic rewards of work—income, prestige, and job and career opportunities? Suddenly, the picture dims.

While the intrinsic satisfactions of caring for patients are probably much the same for physicians and PA's, the monetary and prestige benefits are another story. The mean income of the studied group of PA's was $14,285—more than $5,000 over the average starting income for hospital staff nurses, but only one-third to one-fourth of the net income the American Medical Association reports for its member physicians.

Despite somewhat larger earnings than registered nurses, PA's see the occupational prestige of the two groups as almost identical, and both substantially below the medical doctor's prestige. This fact, coupled with limited opportunities for career advancement, may explain why most PA's plan to return to school for advanced education (nearly a quarter of these to seek M.D.'s themselves) and why nearly a third have already considered entering a different field. While the vast majority know of other job opportunities in the same field—in a different town or a different setting—most see the career opportunities for PA's as limited or nonexistent.

There is, as yet, no natural progression within the job. To get ahead, they see themselves as having to acquire more or different skills and credentials outside, rather than on, the job and to move out if they want to move up. Realistically, though, what chance does a PA stand of making it to medical school? At present, the obstacles are formidable. PA's are usually older than the typical medical school applicant, they often have families to support, and they usually need additional academic credits to meet medical school admission criteria. They face stiff competition from many with superior academic records.

Richard A. Smith and others, writing in the *AMA Journal*, have suggested one way to assist the PA—that is, to award academic credit for the medical knowledge and skills acquired in PA training and on the job. One may well expect the issue of admitting PA's to medical schools to grow in importance in the next few years, as increasing numbers of these new professionals seek to become physicians.

In its first full decade as a health career option, the physician assistant role is meeting the need—graduates are providing accessible, quality care in areas

that have been underserved medically in the past. However, a dual problem looms in the future, as the number of experienced PA's grows: (1) The inadequacy of opportunities for growth and skill improvement within the field, which leads PA's to seek other, more challenging and more prestigious health career opportunities and (2) the barriers encountered in attempts to return to school, in order to proceed up the widely spaced rungs of a potential health career ladder. Attention must be focused on this emerging problem soon, if the PA field is to continue to attract ambitious and dedicated young professionals to fill gaps in health care delivery in communities across the Nation.

(STOHLER)

Working for Fun and Profit

The flea market syndrome is a new phenomenon, all fun to the tire kickers but serious work if you need money.

There's a grizzled old fellow over in space 47 at the movie theater parking lot in San Bernardino every Sunday, rain or shine, in an old straw hat and plaid Bermuda shorts, selling the most unbelievable junk from the back of his station wagon. It never fails. He's there before people have even registered at the meet, going up and down the check-in line looking for bargains. Then, while he sets up a few signs on the wagon, his wife scouts around to the other sellers looking to pick up a real sleeper from one of the greenhorns.

This weekend ritual is a source of income and entertainment for growing numbers of Americans from coast to coast, and it usually goes by the name "swap meet" or "flea market." Swap meet is a misleading name, actually, since barter is rare.

Cash is king at the swap meet–no checks, no credit cards, "what you see is what you get." Or perhaps you get a little less–dirt, grime, or a judiciously placed label may hide critical flaws in the merchandise, and returns are not cheerfully accepted. About the best you can hope for is to learn from your mistake, or to pass it along to some other greenhorn buyer.

The fear that such low business ethics, coupled with loose regulation, will turn the swap meet into a true "thieves' market"–a place where stolen merchandise is regularly unloaded on an unsuspecting or uncaring public, has led

some municipalities—Los Angeles among them—to legislate the swap meet out of existence within their borders.

Swap meet managers stress the entertainment value of gambling in this uncertain marketplace—a carnival atmosphere is created, popcorn and soda pop sold by the management. These same managers staunchly defend the lax regulation—income is strictly a matter of self-report, permits are often not required for such selling—with rhetoric about the free enterprise system at work.

The swap meet in Southern California was studied by sociologist Dr. Gary D. Stohler as a microcosm of the "irregular economy." Focusing on three meets in the San Bernardino-Riverside area, he observed and participated in swapping and sent students out with questionnaires to try to learn how other swappers view this weekend phenomenon.

The question foremost in Stohler's mind was "Is it work?" According to Seymour Wolfbein's definition, it is, since it is "activity which involves the production or exchange of goods and services for pay or for profit." But that was not enough to satisfy Stohler; he wanted to know if those involved in this activity saw it as work or entertainment. In addition, he sought answers to two other questions: What is a swap? And who swaps?

Swap meets, open to the general public, are generally open-air markets set up at drive-in movie theaters or on large vacant lots, at which sellers rent space for a certain period of time in order to buy, sell, or (rarely) exchange merchandise. Sellers are usually charged an admission fee of $5 or less to set up tables or park cars and show off their wares; buyers are sometimes also charged a fee—25 or 50 cents—to gain admission to the selling area. Selling is usually limited to weekends and equipment must be taken down and set up again for each weekly meet.

Economists might put the swap meet seller in the camp of the "irregular economy," along with pool sharks, hustlers, sidewalk artists, and numbers runners, and the other illegal and quasi-legal ways of making a living in which economic man (or woman) may sometimes engage. The relative lack of governmental control on the activities and the income they give rise to, coupled with the informal organization, gaming action, and out-and-out "deviant" or illegal aspects support the swap meet's membership in the irregular economy.

Yet it is definitely a phenomenon to be reckoned with: swap meets are springing up all over the country, and have even given rise to their own trade journals, such as the *Flea Market Voice* and *Swap Meet and Flea Market News*.

Contrary to what swap meet managers might have you believe, swapping is not for everyone. One publication put it this way:

> Some people try and fake you out: they wear old clothes but they have a fist full of money. You know they come out to do a little buying if they can get a bargain. Some of them may be dealers.

Blue-collar and service workers are present at the meet in far greater numbers than their white-collar neighbors. Retired and unemployed persons seem to come out in greater proportions than do housewives and students.

Swapping seems strongly an activity of the married, middle-income set. The well-to-do do not join in, and those with low incomes do not usually turn to the meets to earn extra cash. Singles seem to stay away in somewhat greater numbers than married folk. Stohler suggests that the limited participation of low-income workers may result from the fact that, to swap, one must either have personal discards to sell or the income to invest in items to continue selling.

Members of racial and ethnic minorities—blacks, Mexican Americans—also seldom join in the swap meet in large numbers, unless the meet is in a "counterculture area" or swapping becomes "fashionable" in a certain town. One Mexican American participant suggested, "They may feel they're not bettering themselves by going to the swap meet—they look at swapping as demeaning." Researcher Janicemarie Holtz cites cultural taboos on the physical and moral contamination of "used" objects as a factor keeping some minority group members away.

Is swapping working? Well, yes and no. The California Swap Meet Owners Association itself sees swapping as a business providing "fun and entertainment and wholesome good times" and at the same time "the real workings of American free enterprise." One seller saw it as a way to make a "little extra money without being harassed."

In a survey of 112 swappers, the group was just about evenly split between those who considered swapping work and those who did not. Swap meet managers stress the entertainment aspects, and those new to swapping generally share this view. However, among those who have gotten hooked on swapping, the split emerges. As one swapper said, "If you enjoy it and see it as seeing people and [getting] extra dollars, there is no work." But for those who work at it, it's a different story. Key factors in turning this weekend venture into a job are: Regular participation, needing the money, and putting in effort to get it.

The sellers who show up week in, week out, and who feel they need the (usually) $100 or less they make at the meet to get by, are working there. The other critical difference has to do with preparation surrounding the meet: Stohler talks of "rounds" and "incidents."

The couple who round up old car parts and baby clothes from the back of the garage and head off to set up a table at the nearest meet are likely to view swapping as fun. Swapping for them is an isolated incident, a way to turn personal items into petty cash.

On the other hand, the fellow who regularly scours local garage sales and thrift shops for items to resell, or makes a deal to purchase new merchandise

wholesale to sell at the meet, is making a "round"—an ongoing sequence of activities surrounding swapping. When he's not at the meet, chances are he's doing something to prepare for it during the week. He's working. Swapping isn't his only job—no one in the groups interviewed reported profits consistently large enough to survive on—but it's an important part of his monthly income.

So you can be sure who'll be filling space number 47 at the movie theater swap meet again next week, setting up shop while his wife makes the rounds of newcomers' cars and tables. The easy banter, the haggling over prices may be an afternoon of fun for the amateurs—but for these two, shoring up their pension funds on a Sunday afternoon, it's all in a day's work.

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Part 2.
Stresses on the Labor Force

All Work and No Play

I. Blues and Blahs on the Job

Stresses on the job and off interact to affect all aspects of living and merit careful examination of means to avoid them.

Anxiety, depression, tension, clammy hands, dizzy spells, upset stomach—how often do they accompany the much sought-after white-collar job? What is it about a person's life and job that sets off these symptoms of strain? Such questions are well worth exploring, because recent estimates tell us that the annual cost of job-related mental health problems exceeds the $3 billion mark. Dr. Jack N. Singer and the Industrial Psychology Association of Colorado conducted a study of job strain, using written questionnaire responses of 1,148 men and 153 women holding white-collar jobs in industries across the Nation.

Singer surmised that a worker's personality shapes his or her ideas of stress. If employers could know the levels of stress—real or imagined—workers were undergoing, they could predict and take steps to minimize job-related strain.

As sources of stress (or stressors), Singer looked at the fit between the desired and perceived levels of five factors in the workers' job environment. These were:

Role ambiguity, defined as the gap between the amount of information workers have about what's expected of them on the job and the amount they feel they need to get their jobs done adequately.

Subjective quantitative workload, the notion of how much work one has to do. Having more work than can be completed in the allotted time (over-

load) or—on the other hand—not having enough to do (underload) can be a source of work stress.

Underuse of abilities, the lack of challenge or growth opportunities on the job—or what might be called "qualitative underload."

Participation in decisionmaking, the extent to which workers can or cannot influence decisions relating to their own jobs.

Responsibility for other people, making decisions that influence the future of others.

The study did not attempt to measure absolute levels of these elements in the work setting. Instead, it looked at workers' *desired* levels of workload, decisionmaking, responsibility, and so on and compared them with what workers believed the *actual* demands or opportunities were in their environment. The lack of harmony between the desired and the perceived was felt to be the best indicator of job-related stress.

There were few surprises in the calculations. Most of the employees responding:

- Had somewhat more role unhappiness than they would like.
- Wanted more responsibility for people.
- Wanted their skills and abilities to be better used on the job.
- Wanted to participate more in decisionmaking.
- Wanted their workload to be reduced.

The most frequent gripes were underutilization of skills and lack of participation in decisions. While nearly everyone felt overworked, that didn't seem to be a major contributor to job stress.

The greater the spread between desired job conditions and actual job opportunities, the more strain was reported. Strain, in this study, was measured in three ways:

1. A 20-item scale assessing the workers' anxiety, depression, and/or irritation with their work.
2. Eight items measuring occurrence of psychosomatic symptoms (such as dizziness, clammy hands, and rapid heartbeat) while on the job in the past month.
3. A 15-item test of job-related tension.

Lack of participation in decisions was found to follow job-related tension most strongly. Underuse of abilities was tied to both job-related tension and reported feelings of anxiety, depression, and irritation. Work underload, as well as overload, resulted in increased tension. Men overall had less trouble with responsibility for others and with role ambiguity than did women. Women white-collar workers reported too much responsibility for others (rather than not enough) as a job strain factor.

The author suggests that the differential response of women to role ambiguity may be due to this group's relatively shorter tenure on the job; they may, as a group, not be as attuned to the cues and nuances of the "informal communication system" by which role responsibilities are defined.

Numerous past studies have noted the relationship of job stress to reported strain. Singer's study, however, also looked beyond the work environment to examine the effect of external life stresses on perceived job strain. To do this, he used a scoring method that reveals—in "life change units"—what marriage or divorce, a household move, health changes, and changes in financial status do to a person's life. Singer found that the median score of white-collar workers was high enough to classify them as being under "moderate life stress," even when all job-related stress factors were omitted. And when job-related items were disregarded, stressful events in outside life were enough to lead to job-related strain. Looking at the strain measures separately, he found life changes to be most closely associated with changes in the anxiety-depression-irritation index, while job mismatches of desired and existing opportunities came out most often as causing job-related tension.

The highest levels of strain—on both the anxiety and the tension scales—occurred when job stress was piled on top of life stress outside the job. This finding underlines the value of employee assistance efforts, which seek to help the worker with problems both on and outside the job, in order to boost job performance.

Another area explored in this study—but without much success—was the relation of job involvement to job strain. Involvement, defined as "internalization of values about the goodness of work or the importance of work in the worth of the person," was seen as softening or increasing the effects of life and job stress on work strain. However, the study did not bear out this relationship and commitment to the job did not significantly increase or diminish stress impact, as already described.

Overall, the study showed that—for men—underutilization of abilities and lack of participation in job decisionmaking contribute more to work strain than do outside-the-job life stresses. For women, life stresses play a greater role in strain. However, it should be noted that the women in Singer's sample had, on the whole, higher life-stress levels than did the men. Whether such boosted life stress is characteristic of women in white-collar jobs, or peculiar to the particular group studied, remains to be seen.

This study has shown that, generally, when the opportunities or demands of a job fit the abilities and needs of a worker, the least strain occurs. When there are worker-job mismatches, or when outside life stresses contribute to job strain, remedies can be focused on the worker or the job.

Intervention methods aimed at the worker are not new. One early preventive mental hygiene program, for example, included lectures, individual

therapy, and readings on psychology as they relate to the work situation, homelife, and interpersonal relations. A more recent idea is the proposal to set up an independent job improvement service, providing developmental and vocational counseling to help workers get in touch with their occupational needs, abilities, and desires. Another worker-oriented approach is the early identification of "psychologically vulnerable" workers, so that certain "types" of individuals can be matched to jobs with particular "stress characteristics."

Looking at the problem from the viewpoint of job structure, Singer proposed other solutions. Workers should be allowed to participate more in making decisions that affect them, their skills and abilities should be tapped as fully as possible, and workloads should "be a compromise between underload and overload."

Singer further suggested that supervisors be trained to use "consideration" leadership techniques, positive reinforcement, and recognition and to be consistent and predictable in directions and priorities.

Work strain can be reduced by helping workers cope with the inevitable stresses arising on and off the job and by redesigning job environments to minimize contributors to stress. It is hoped that such measures will help reduce job-related mental health problems and the resulting personal and economic costs.

II. Four Days Shalt Thou...

A 4-day workweek for papa is sometimes a mixed blessing for mama, but it's better if she has a 5-day job.

A 3-day weekend every week sounds like almost enough to turn life into one perpetual holiday, but is it really? A number of companies have experimented with the 10-hour day, 4-day week, and researchers are watching and studying these experiments to see what effects they have on productivity, work satisfaction, homelife, and use of leisure time. Dr. David M. Maklan is one such researcher. He studied the impact of the 4-day workweek on a group of 233 white male blue-collar workers.

Maklan was less concerned with the impact of the change on how they did on the job than he was with its influence on life outside the job: What effects did it have on a man's relationship to his wife and children? On what he does around the house? On his recreational activities?

Looking at the group as a whole, and comparing it with a small sample of men in similar jobs but still working a conventional 5-day week, Maklan found few significant differences. The short work schedule does seem to insure somewhat more satisfaction with one's leisure time. But what use is made of this time? Unlike what some social theorists might have us believe, the man who finds himself with an extra free day on his hands does not suddenly take up studying shop math or volunteer for membership on the Boy Scout Council. Neither, however, does he spend an extra 8 hours parked in front of the television. The man with 3 days off each week seems to spend a little more

time reading the newspaper and magazines and almost twice as much time loafing or "doing nothing." He also spends an average of nearly 2 hours more per week on outdoor sports—fishing, hunting, hiking.

This new man of leisure does not seem to spend more time than other men in helping with routine household chores, but he does take additional time for major household tasks, such as gardening and repair work.

Perhaps best off in this regard are the 4-day workers whose wives work full time 5 days a week. Since these husbands leave the house earlier and return later than their wives, they are not usually expected to pitch in to help mama with day-to-day chores, and they can take on the traditionally "masculine" maintenance tasks on their day off.

With 3 days to devote to off-work activity, these men spend more than five times as many minutes a week as other fathers doing child-related tasks, without sacrificing time shared with their wives. In fact, one finding that particularly interested Maklan was that the compact workweek led to improved marital adjustment for some, but poorer family relations for others.

In general, men with children under age 15 at home were more satisfied. They found the free day gave them an opportunity for greater family companionship and generally helped reduce family pressure and tensions. Two factors may contribute to this: The 10-hour workday seems to put a crimp in evening socializing outside the home, so the husband spends more evenings with his wife and kids; having a day to oneself—or to share with "the little woman"—while the children are in school may also make a husband more inclined to devote one of those precious weekend days to a family outing.

At the other end of the spectrum—and least likely to be pleased with his new home situation—is the older male worker with no children living at home. His plight is, perhaps on a smaller scale, much like that of the man newly retired. While he doesn't report objecting to the new work schedule itself, he does report less satisfaction with his marriage. Some scholars have found that, in the "empty nest" stage, older couples often show signs of a switch in traditional decisionmaking power and a breakdown of traditional sex-based division of labor at home. In short, the wife often "rules the roost," and it may be that spending more time at home only makes a husband realize sooner that the pecking order has changed.

The workers on a short work schedule, as a group, show somewhat lower satisfaction with their jobs than do the 5-day workweek men. It is not clear from the study why this is the case, although the data do provide a few leads. For one, regardless of age, those on a 4-day week reported greater job fatigue from working an extra 2 hours each day. Some also reported feeling management was pressuring them too much to put in overtime. While those on the 4-day week worked a few hours more per month than did the 5-day workers, the difference was not significant. Perhaps the most important clue, however,

comes from the fact that workers over age 35 were the unhappiest. Maklan felt that the cause of their dissatisfaction was not any great change in the energy required to do the job, but rather "interference with the normal tendency toward job habituation." In other words, for those over 35, upsetting work patterns was a source of discomfort or displeasure with the whole work situation.

If there is a single, underlying message in Maklan's data, it is that we set our patterns early on in our work careers, we don't like disruption of these patterns, and we tend to respond to disruption in kind. Rather than developing new behavior patterns to fit the new circumstances of a longer workday and a 3-day weekend, Maklan's workers filled their extra day of leisure with more of the kinds of activities to which they were already accustomed—overtime work, sports, family activity, and household repairs. As has been noted elsewhere:

> The impact of specific leisure choices appears restricted to the power to intensify patterns of behavior that are already established. Leisure choices do not seem to have the power to change behavior. Blue-collar attitudes and ideas may be modified, but conversion is unlikely.

Maklan himself observed that, given the nature of the blue-collar work routines of the men he studied,

> By itself, reorganizing the hours devoted to the job has limited potential for fostering a greater synthesis between work and leisure. Because what transpires in each of these life spheres is interrelated, so long as work activities are designed in a fashion which blocks initiative and stifles learning, innovative behavior and personal growth through engagement in novel endeavors outside the workplace are unlikely to occur with any degree of regularity.

People, Maklan concludes, must be educated in the productive use of leisure time, if the 3-day weekend—and ultimately retirement—are to be used in pleasant and creative ways. He challenges the school system to provide training and experience in the use of leisure and calls for continuing education programs "designed to meet the changing needs and aspirations of a shifting population." He endorses creation of a National Economic Security Fund for this purpose. The fund could be linked to existing unemployment insurance funds and would permit up to 1% of the labor force at any one time to be engaged in a "self-renewal program" lasting up to 2 years. The program would try to reduce the numbers "of people who remain frozen in their value systems or ways of seeing things, [for such people] become a retarding force" in society.

III. Swedes at Work and Play

If the work you do is demanding but does not give you much latitude in deciding how to do it, mental strain can set in.

Will the man who stares at widgets all day on a punch press or assembly line go home to stare at the TV all night? Or will he head out for a bar or for dinner and the theater? Or off to the woods to hunt quail? Dr. Robert A. Karasek, Jr., set out to find out if a person's work affects his or her use of leisure time. Debates on this topic usually hinge on the "carryover" vs. "compensation" issue: Will dull, passive jobs foster passive, unimaginative use of leisure, or will workers break loose in their free time, balancing their job's passivity with active, exciting recreation?

As Karasek notes from the outset, jobs usually have many aspects. Before we can judge whether carryover has taken place, we have to be able to characterize the jobs and recreations. Karasek used answers to a questionnaire to measure two dimensions of jobs: *Job discretion*, or the amount of freedom a worker has to make decisions on the job, and *job demands*, the pressures and stresses a job imposes on a worker. By using the two dimensions, he has a way of dealing with recent research findings on job strain caused by the combination of a high-stress (high-demand) work environment with low job discretion. Karasek calls jobs with low demand and low discretion passive; those with high demand and high discretion, active. Those with high discretion but low demand, he labels leisurely; and those with high demand but low discretion, heavy. All this can be put in a simple diagram:

		Job Demand: Low	Job Demand: High
Job Discretion	Low	Passive	Heavy
	High	Leisurely	Active

From this start and an assist from past research, Karasek makes two kinds of predictions about mental strain and leisure activity. He suggests that those with passive jobs will choose less active recreation than those with active jobs. He also thinks that leisurely jobs will result in less mental strain than heavy jobs.

To test these ideas, he studied the results of a big 1968 survey of one-tenth of 1% of all Swedes aged 15 to 75, almost 6,000 people. But he looked most closely at the responses of nearly 1,500 employed men between 18 and 66 who lived in urban areas.

So far as the overall effects of work on leisure were important, Karasek found that—contrary to the image many workers have of the "carefree" unemployed—mental strain is four times higher among those without work than for the fully employed, regardless of the nature of their work. Furthermore, people with jobs have more active leisure time and participate more in political activity than does the population as a whole. In part, the reason may be the often high cost of fun, but it may also be that the same factors—such as disabilities—that keep people unemployed or unemployable also bar them from participation in other activities of life, fun things or not.

Out of the mass of data on work conditions and types of leisure activity, Karasek was able to draw some significant conclusions. In general, they support the "carryover" idea: People with active jobs tend to choose more active leisure pastimes, while those with passive jobs draw more on "mass cultural" leisure pursuits, such as reading popular magazines or window shopping. Those whose jobs make psychological demands on them tend to engage in more leisure activity, while those whose jobs require greater physical effort tend to be less active after work. (The latter was the only finding that didn't support the "carryover" premise. The "compensation" shows may well be due to a worker's being just plain bushed.)

In the political arena, workers with active jobs (high demand, high discretion) were more likely to be found giving speeches and writing letters to the editor, while those holding jobs with little discretion and heavy demands had more of a yen for mass protests, walking picket lines or handing out leaflets, perhaps as an outlet for their frustrations.

What a man in the group studied did during his time off was found to be

virtually unrelated to mental strain measures, but closely tied to amounts of freedom he had to be on his own on the job. Those with active jobs—with more freedom, but higher psychological demands—showed the most variety in their choice of leisure pursuits. Karasek's findings led him to suggest that job discretion, coupled with responsibility, trains or "socializes" workers into self-directed behavior, which carries over into their recreational choice as well.

However, Karasek noted that income and education are often high for those with high activity and sought to explore these relationships further, before reaching any conclusions. To review some of these findings, let's look first at the impact of economics on leisure pursuits. At low- and middle-income levels, there was little difference in the choice of recreation, but at the highest income levels, it appears to play a bigger role.

Age—as one might expect—plays a big part in type of leisure activity. As one pushes out of youth into middle age, active physical leisure pursuits decrease and suburbanite leisure (gardening, visiting, hobbies) and political activities increase. There are few surprises here: With tenure on the job, Lars can afford to go out to a movie once in a while—but as middle-aged spread and family responsibilities creep up on him, he may trade in his skis for rose shears and a wheelbarrow. Activities closely tied to dating and courtship—going dancing, or to shows and nightclubs—also, alas, decrease with age.

The nonwork factor with the greatest impact on leisure choices, however, was found to be education. In fact, in the full Swedish population, education accounts about as much for the differences in what leisure choices you make as does job content—and neither accounts for as much as 20% of this variation. Furthermore, the importance of job content in influencing recreation choices decreases with increasing education. In short, to best predict leisure time use, you have to take into account not only the job but also education, income, and social class.

Karasek feels the interaction of education and employment can be explained by the fact that school and job both serve as training grounds for an individual's personal growth and development of competencies on and outside the job. For the 52% of the Swedish population that completed only the required 7 years of schooling, the workplace has been their school, socializing them and teaching them both skills and values. This role of the employer as teacher should not be ignored.

The study has some important implications for the reforms of the modern work environment. First, Karasek's measures of job dimensions give rise to a definition of a "good job"—and it is not necessarily a job that makes few demands of a worker. In fact, the most satisfying jobs are found to be those in which demand or challenge is coupled with considerable discretion in responding to the challenge. Where work is demanding, but discretion is limited, mental strain results.

Those with active, satisfying jobs will have more active leisure. Because people with active leisure time consume more leisure-related services, Karasek sees importance in changing the job environment to enhance active leisure and hence provide more leisure-related jobs in our service-oriented, underemployed postindustrial economy. He holds out hope that such a rearrangement of work conditions may be a source of a new equilibrium in postindustrial society, an equilibrium to be based on self-perpetuating patterns of high service consumption. In short, instead of being urged to buy a new car to keep the economy rolling, workers of tomorrow may be urged to play more tennis, buy new skis, try archery! And their employers will be urged to give them free enough rein on the job so that they will learn to take charge, to be in command of their destinies at work and play.

Not for Love or Money

If you quit before high school or took graduate work, and are a woman, beware: you may be on the road to divorce.

America's divorce rate climbed slowly but steadily until the 1960's, and then it skyrocketed. One estimate holds that, if the 1973 rate were to continue, 40 to 45 percent of American marriages would end in divorce. Something has obviously gone awry with the great dream of domestic bliss, and social scientists of all bents—psychologists, sociologists, economists— have all come up with theories, studies, and explanations.

Dr. Andrew J. Cherlin has tapped the extensive data bank accumulated by the National Longitudinal Survey on the labor market experience of women aged 30 to 44 at the beginning of the survey in 1967. These data are based on direct interviews with the same group of American women in 1967, 1969, and 1971 and their answer to mail questionnaires in 1968.

Cherlin's work focused on the 3,527 women in the study who were married by 1967 and who did not live on farms—2,696 whites, 770 blacks, and 61 members of other nonwhite groups. In 1967-71, 173 of the women bade a farewell to their husbands. (This relatively low rate is not surprising, since most separations occur early in marriage and most of the women studied had probably been married for several years.) Cherlin contrasted the group who separated with those who did not, looking for explanations as to why such splits occur. (The term "separation," as used here, refers to any marital split-up—informal or legalized separation or divorce—that results from marital dis-

cord.) He had the feeling that certain economic and social factors produce stresses that can lead to conflict and ultimately to a marital breakup.

Looking at economic factors—income, savings, job opportunities—Cherlin finds strained budgets lead to strained marriages. In America, the husband is typically seen as the "breadwinner." If he fails to bring home the paycheck regularly, he can expect to face separation. In fact, this study found it was the security and stability of the income—as reflected in the presence of savings and a husband's steady employment—rather than the dollar amount that contributed to keeping a marriage together. This echoes the findings of some other studies.

Another economic factor placing strain on marriages is the increase in options for women in the labor market. As long as a man can earn more in the labor market than a woman can—and particularly when a woman's wages are unlikely to be much above those paid for domestic service—it makes economic sense for many couples to pool resources and have the man go out to work and the woman stay home to do housework. Women and men commonly enter marriage with unequal "bargaining power" because of their unequal chances of high-paid outside employment.

But, as economic tables turn, a woman is less likely to stay in a marriage. In fact, the greater a woman's actual or expected market wage is relative to her husband's, the less likely the two are to stick together when the going gets rough. Again, it is the ratio of incomes, rather than the actual dollar amount of either, that can tip the balance.

The only time when the actual dollar level becomes more important than income ratios or income security is when income is very low. One might expect that there is some minimal level or "critical mass" of income necessary to sustain a marriage.

If a woman isn't happy in her marriage, and knows she can hold here own at the labor market, the fear of "what people might say" can still keep her from setting out on her own. Cherlin found separation more likely among those women who accepted the propriety of a married woman's going off to work "even if her husband does not particularly like the idea." As the author notes, though, the very wording of this item may be mixing a measure of willingness to work with one of tolerance for marital discord.

Sociologists have long been trying to measure what it takes to hold a marriage together—or to break it apart. Some of their findings, well reported in the popular literature, have once again found support in the present study:

Couples married longer, and those who were older when they first married, were less likely to separate.

Those in a second or subsequent marriage were more likely to split.

May-December marriages—particularly when the woman is December—were least likely to last.

But the study turned up some interesting, newer findings in the social area as well.

Taking a close look at a woman's education and its relationship to marriage, Cherlin found the customary high-separation probability for those with an eighth grade education or less and the expected low rate for those with 4 years of college. But when he picked out the group of women with some post-graduate college education, he found they had the highest separation risk of any education-level group. This indicates that the influence of education on marriage stability is not purely the effect of socioeconomic status, as previous researchers have suggested. Cherlin proposes that the attractive career opportunities—often with a need for geographic mobility—and the time and effort invested toward a career may make marriage a less enticing option for the highly educated wife.

The presence of youngsters appears to act as a deterrent only when they are preschoolers. Parents of school-age children are as likely to separate as those without children. The author explains this by reference to the high economic and other costs of caring for very young offspring, which make going it alone—particularly for the partner with custody of the children—a less appealing choice.

Although black women were almost twice as likely as whites to separate from their husbands, reasons for the breakups were quite similar. In fact, once the economic and social factors were taken into account, no separate influence of "race" or "culture" was left unexplained. Consequently, Cherlin concludes that an effective way to lower the probability of marital separation among blacks would be to improve their social and economic circumstances.

This article began with references to the zooming divorce rate in America, and went on to discuss economic and social factors that contribute to divorce. Yet it is important to note that Cherlin found that most of the women 30 to 44 years old were not likely to be separated—regardless of economic and social considerations. Only 9% of black women and 4.5% of whites separated from their spouses in the 4 years under study. For those who did, the factors examined played a relatively small role in explaining the event.

Nonetheless, the study does show that economic and social factors can put strains on a marriage that can hasten its demise:

> If a woman is in her second marriage at ages 30 to 44, she is more likely to experience a separation. Furthermore, economic factors seem to weigh more heavily in the separation plans of previously married women than they do in the decision affecting their first marriage.
>
> Women with preschoolers are only half as likely as others to go through with a separation.
>
> A woman 7-1/2 or more years younger, or at least 1-1/2 years older than her husband is twice as likely to bid him goodby as is a woman the same age.

Families with no savings are twice as likely to call it quits as are those with $1,000 or more tucked away.

Wives who can earn as much or more than their husbands are more likely to split up than are those with lower earning power.

In short, most married middle-aged women stay married. For those who don't, economic factors—a stable family income, costs of child care, the wife's earning power—do seem to play roles in the decision.

New Workers of the World, Unite!

If you are looking for a new class struggle, don't turn to the well-paid scientists and engineers to lead it.

Much has been written about the emergence of "new" professionals, relatively well-educated and no longer worried about basic subsistence needs. They cannot be satisfied with higher salaries alone, but also seek cultural and recreational outlets for self-fulfillment. Engineers and technicians fit the model.

Dr. Howard P. Greenwald examined questionnaire responses of over 700 scientists and engineers living in the San Francisco Bay area to items designed to assess their political stance and relate it—if possible—to other factors in their lives. In particular, he was concerned about the impact of economic insecurity on their political and social outlook.

Not a random group by any means, Greenwald's sample was carefully chosen from the ranks of area residents holding degrees in physics and engineering who had worked in research and development, in hopes that they might be typical of all persons working in technical fields. The largest group of workers in the study consisted of present and former employees of a large government-supported research laboratory (436 individuals). A second group consisted of 99 engineers in the research and development branch of a large private aerospace firm. Ninety-three others were engineers who had been unemployed at some time in the previous 3 years and had registered with the California Employment Development Department. Two other groups were

jobseekers registered with a major professional society and recent layoffs from a university research and development lab.

Those in the study are, in the main, a relatively creative, prestigious and highly paid group, willing to undergo rigorous training in pursuit of money, professional status, and security. And yet, in their chosen field, they are now frequently exposed–directly or indirectly–to the dangers of unemployment, economic insecurity, and career frustration. With the rapid increase in college graduates in the labor force since World War II, many other professionally trained workers will share the risks and frustrations of unemployment and underemployment that scientists and engineers encounter.

Greenwald looks to his respondents to provide indications of "changes in the thinking of a more general population whose high education is not matched by the expected rewards." Specifically, he is interested in the impact of economic insecurity on professional values, political thinking, and occupational ideology (acceptance or rejection of technocracy).

Greenwald makes a distinction between "professionalism" and "careerism" in looking at the way scientists or engineers approach their work. He sees the former as a commitment to the field in which one works, looking to colleagues and professional societies for recognition and support. The latter he views as more nearly a "company" approach–where, for example, status is more likely to be tied to rising into the management of the employing firm.

In looking at commitment to the chosen field, the study finds that engineers' economic insecurity or even their feeling or fear of insecurity does reduce their satisfaction with the career choices they made. However, those most likely to experience dissatisfaction are primarily "careerists." In general, the devotion of engineers and scientists to their profession does not depend heavily on the economic benefits it can provide–it is much involved in the status that society bestows upon the role and on the intrinsic satisfaction the work provides.

The philosophic commitment–to the work itself, or to the company one works for–is unlikely to shift in the face of economic insecurity. However, careerists–with stronger allegiance to their company than to their profession–are apt to see their job uncertainty as a betrayal: As one observer cited by Greenwald has noted:

> Many of those guys got into engineering in the '50's and '60's because government and industry told them they'd always have secure and well-paying jobs . . . . Now they are bitter and angry, and they feel they have been betrayed.

When scientists feel their economic security is threatened, how likely are they to band together with their fellow workers for mutual support?

In general, when the scientists' perception of economic insecurity—their "subjective insecurity"—was high, they were more likely to accept collective solutions to unemployment and underemployment problems. For example, were more likely than their more secure colleagues to endorse a shortened workweek, curtailed admissions to college science programs, or unionization as possible ways to solve their career problems. Those who had actually lost a job in recent years favored all of these methods but the shortened workweek.

Given the well-established individualism of the scientist, such collective solution seeking is particularly worthy of note. Some support may be found in this trend for Greenwald's proposed "new working-class model" of well-paid professionals uncertain of their job security. The findings also add weight to the impression of several observers that the aerospace recession of the early 1970's gave a boost to unionization of scientists and engineers: AFL-CIO unions reported positive response to their organizing efforts in 1971-72. Several engineering societies broadened their traditional roles in this period, to include "unionlike" economic programs for their members and to lobby and support political candidates who favored expenditures for technology.

It may be, however, that the tendency toward favoring collective solutions has been stronger among engineers than among scientists. (The study does not distinguish between the two.) As one mathematician told his interviewer:

> The scientist as a personality type is a loner; engineers and doctors are uniform—but physicists and mathematicians are real individualists.

A tendency to favor collective solutions, such as those described here, does not necessarily imply a move away from "elitist" beliefs—for example, the conviction that social rewards should be related to natural ability. To test the "new working class" theory further, Greenwald looked at more specific measures of equal rights, blame-placing for economic misfortune and party affiliation.

Recent change in political party preference—a possible symptom of political discontent—was found most often among those with a high "subjective insecurity" about their economic status. However, there was no clear direction of such change from one political party to another.

The respondents' behavior in placing blame for the economic problems experienced in their career field lends additional support to the "new working-class" theory. Economically insecure professionals in technical fields tended to blame the system for individual failure more often than their secure colleagues did. The strongest predictor of "system blame" was found to be not

personally experienced unemployment but having friends or colleagues who had lost their jobs. The author sees this as a form of indirect stress and notes that it is "typically the best predictor of attitude change in this study."

In Greenwald's view, the key test of the theory that engineers and scientists are emerging as a new working class was whether there was any relationship between their feelings of economic insecurity and their willingness to embrace the idea of economic or political equality. His analysis showed a weak relationship at best. On the contrary, he found that high-salaried scientists and engineering professionals (irrespective of pay), as groups, were most likely to reject both forms of equality.

Technocracy is defined in this study as "a world view whose main tenet is the substitution of technical expertise for political skills and business know-how in the leadership positions of society." Faith in technocracy did seem weaker among scientists who either felt insecure in their jobs or were working in positions below their skill level. The strongest proponents of the view were the "well-placed but frustrated"—strongly motivated, relatively young Ph.D.-holders, integrated with circles of friends in technical fields, secure in their economic future, but dissatisfied with the careers they chose. Consequently, the author sees technocracy as a protest ideology, albeit a rather elitist one, and not in harmony with the "new worker" theory.

Overall, Greenwald finds that the new working-class model poorly fits the scientists and engineers in his study. The research physicists and engineers—whether employed, unemployed, or underemployed—he concludes, are not likely to develop into the vanguard of social change. Perhaps their individualism, or an inherent satisfaction with work, defuses political discontent. The author cautions that there are some signs of political discontent—for example in party shifts and trends toward support of collective solutions—that could be fanned by future recessions. But those looking for a new movement, a revolution of educated, well-paid workers, will have to look elsewhere for their battalions.

Family Affairs

I. Like Father, Like Son

Inequities exist in the labor market but don't blame very many of them on your parents or where you have lived.

Social and economic inequality is a fact of life in American society. The "wealthy and well-bred" continue to have an edge on others in school and in the marketplace. Dr. Larry J. Griffin examined the findings—for white men only—of a survey in which high school sophomores at 42 schools were surveyed by the Educational Testing Service in 1955 and followed up in 1970 by the Institute for Research in Social Sciences, the University of North Carolina. Data on this 947-man group were studied to see if social background directly affected material and social success in the labor market and if schooling and market factors could be held responsible for transmission of inequality from one generation to the next.

Griffin found that, for this group, ability is not the only factor in achievement. Apart from ability, men with "advantageous" social backgrounds still completed more schooling, attained more desirable and higher status jobs, and earned more income.

Looking first at the amount of schooling the men completed, Griffin developed a statistical method for measuring various school processes, which included information on social background, friendship patterns, courses taken, and teenage career aspirations. Altogether, these factors explained only 47 percent of the variation the young men showed in years of school completed. Because of the nature of the study, the relationships posed intriguing ques-

tions rather than supplying answers to the problems of "inherited" social inequality. Why, for example, do Presbyterians and Episcopalians complete more years of school, on the average, than other Protestants, and Jewish children complete even more? Why does a student in a metropolitan area complete more schooling than one in a rural area? Why do children from large families terminate their education earlier than others? Studies that look more closely at the attitudes and behaviors accompanying these tags are needed to answer such questions.

A second area Griffin examined is annual earnings. Some of the same background factors also have an impact on later earnings: Religion, metropolitan origins, family size, and a new one—attending school in the West. In addition, sons of working mothers in Griffin's sample wound up earning about $800 less than those whose mothers stayed home. The impact of religion (or, more likely, behaviors associated with a certain religious upbringing) is more complex in the case of earnings than of school attainment. While Jews outearn most Protestants, Griffin also found that, if he took educational disadvantages into account, Catholics also exceeded Protestants' earnings by about $1,000 for similar jobs.

The author looked closely at a number of factors in the schooling of the young men in his sample, to see what influence, if any, they might have in reversing the trend by which inequalities are passed on from one generation to the next. Those he studied—curriculum, adolescent job aspirations, academic self-image—generally had little impact on earnings or job status. However, two kinds of courses did seem to affect later job attainment—each semester of mathematics of science was "worth" $114 per year in salary 15 years later. In this result, the author found hope that school can do more than merely perpetuate existing economic inequalities—it may even help break the cycle. Again, though, the "why" of the courses' impact remains unexplained. The reader may surmise that such background placed graduates at an advantage in entering the "glamor" fields of science and technology in their heyday in the 1960's—or perhaps functioned as a "mental discipline." One can only conjecture.

Turning to occupational status, the author found that the social background, ability, and educational factors he examined account for just over a third of the variation in status among the group. The background factors of import here are father's occupation, possessions in the home (presumably an indication of wealth), religion (specifically, being Jewish), and—once again—attending high school in the West. However, most of the effect of religion and western living on job status is accounted for by the way these effects are related to educational attainment, which, in turn, affects status. In fact, Griffin found that "educational certification is the only crucial variable involved in positioning men in the occupational structure, regardless of whether occup-

tion is measured by status, substantive complexity of work, or skill and training demands."

Yet background and schooling together accounted for only 43 percent of the difference in job achievement—leaving more than half unexplained in the author's plan. Rather than chalk the remaining differences up to luck or chance, Griffin turned to an examination of postschooling experiences to provide insight into other sources of inequality in attainment. Specifically, he took three measures that he found to have an influence on earnings—apprenticeship, on-the-job training, and company training programs. To these, he added measures of work experience at the present job and other jobs, and the background and educational factors already discussed, to see if this new model better explained job performance.

Griffin found that experience on one's present job, previous job experience, and on-the-job training all contribute to increased earnings. The payoff for experience on one's present job (a combination of tenure/seniority and job-specific knowledge) is greater—as might be expected—than for having experience with other employers. Of the three variables, on-the-job training has the greatest effect on earnings. Each year of experience with a firm is worth $287 in added earnings; each year on a previous job is worth $131; but a "unit" of training is worth $869. Apparently, though, work experience acquired while still in school is discounted and does not result in the economic advantage ordinarily gained from a year at a previous job.

The effect of schooling on earnings gave rise to some hopes—albeit slim—for a way to break the generation-to-generation cycle of inequality in America. A look at postschool experiences engenders still greater hope. As Griffin notes, "Post-schooling experiences are important determinants of earnings and account for some previously unexplained variance in economic success. Moreover, since these experiences are not heavily dependent on either social or religious background, they represent mechanisms through which men from lower-status families or 'disadvantaged' religious backgrounds can increase their earnings potential." While who you are and where you come from still play a part in landing a job, what you do on the job—experience, training—can serve as something of an equalizer for men of differing backgrounds.

Perhaps the greatest leveling influence in the marketplace, though, is work satisfaction. Griffin found that socioeconomic achievement accounted for less than 5% of the variation in the work satisfaction measures he examined. When the satisfaction measures were analyzed down to four factors—labeled challenge, utility, work satisfaction, and pride—variance in the factors that could be explained by education, job status, or earnings was still quite small. None of the factors was noticeably affected by social origins, either. Griffin concluded from his findings that different kinds of work provide different

kinds of rewards, so that many men can and do achieve "psychological success"–job satisfaction–regardless of where they started on the social and economic ladder. Whether such satisfaction is the result of lowered sights–reduced ambitions–which have resulted from acceptance of social inequality, is a topic the study does not pursue.

Inequities persist in the American marketplace; yet most of them by a long shot are not traceable to social origins (who your parents were, where you lived, etc.). Less than a quarter of the variation in years of schooling obtained, only about 17% of occupational status variation, and less than 5% of inequality in postschooling "investments" can be attributed to social background factors. Regardless of social origins, some men will display more ability and ambition than others–and will wind up in better or more satisfying jobs. Schooling, Griffin shows, can exert some control to counter the trend toward "inherited" job inequality, and on-the-job training and job tenure can do even more. The challenge of Griffin's study is to look beyond background factors to seek sources for most of the variation in job attainment, which remains unexplained in his models. Is all the rest chance, or are there ways in which man can further shape and control his job destiny?

II. Brothers under the Skin

As with Cain and Abel, brothers aren't always carbon copies; they often differ widely in both IQ and earnings.

Somewhere on the border between economics and sociology stands a brave band of researchers deeply concerned about the social aspects of economic achievement. They may latch eagerly onto existing data bases, as Griffin has done, or generate data on their own. Dr. Michael R. Olneck combines these approaches to study factors affecting career success of brothers (aged 35 to 59 in 1973-74) in Kalamazoo, Mich.

Kalamazoo was selected because, starting in 1928, the public school system there recorded the results of IQ tests for all sixth graders. In an ambitious followup effort, Olneck identified sets of two or more boys with the same last name who had been sixth graders between 1928 and 1950, and managed to contact 916 such individuals for phone interviews. From his efforts, he was able to find 346 pairs of brothers for whom he had sixth-grade test data, as well as information on family background, education, occupation, and income.

This sample provided unusual opportunities for exploring what family-related factors do to achievement in school and in the job market. Unfortunately, some characteristics of Kalamazoo make it difficult to generalize findings from there to the Nation. What happed was that the group of brothers Olneck located contained a disproportionate number of well-educated managers, administrators, and proprietors; nearly all the men interview-

ed were white; and more than 93% were married and living with their wives.

The brothers study is important, nonetheless, because it gives us an opportunity to look more closely at the influence of family background on achievement and to take into account much more than just the usual measures of father's education and income or family size. In fact, if we can assume—as Olneck did—that any similarity in brothers' attainment is due to their common family origins, we can get a new handle on how much of a man's success is due to his homelife and to his parents.

For those who decry the transmission of economic inequality from one generation to the next, perhaps the most startling result of Olneck's study is how very different brothers are. Like Cain and Abel. Any two men (*not* brothers) drawn at random from Olneck's group were—on the average—likely to differ by 16 points on the IQ test, 2.66 years in education, and $7,690 in current annual earnings. A pair of *brothers*, on the average, differed 12 points in IQ, 1.78 years in education, and $6,600 in earnings—far from carbon copies, or joint heirs of a fate transmitted by their parents.

Olneck looked at what he found in two ways: First, as data on a collection of individuals; second, as information on pairs of men for whom background factors were held constant, and thus "controlled."

For the group as a whole, his findings are similar to those of other studies. Socioeconomic background (father's education, father's occupation, number of other children) "explain" about 13% of the variation in IQ scores for the group. These same three factors account for about a quarter of the variation in education (years of school completed), while one-third of educational differences can be attributed to tested intelligence alone. In short, tested ability had more to do with school success than background did.

Schooling, in turn, had a direct effect on the status of the first job a man landed—and the rung on which he started his career had a lot to do with his later job status and yearly earnings. Olneck concluded that the principal economic effect of schooling was to screen men for selection into the various occupational levels: For the whole group, each extra year of school added $1,205 a year to later earnings.

But reexamining the data as information on pairs of brothers leads to some significantly different findings. The study clearly demonstrates that researchers should be wary of equating "family background" with socioeconomic status measures alone. Studies that make this mistake—to judge from Olneck's findings—will overestimate the effects of intelligence on schooling and underestimate its effect on income. In the Kalamazoo data, 43% of the relationship between test scores and education can be traced to family influence (factors brothers hold in common)—or, as Olneck puts it, to the fact that "men with high test scores come from families which somehow encouraged both higher

scores and lengthier schooling." The same higher scoring men usually got better jobs when they started to work, very often because they had stayed in school longer. This career advantage—in job status and earnings—persists regardless of background.

How do these findings relate to the view that America is a "meritocracy," where skill and ability are awarded higher status and better pay? When Olneck looked at the brothers' family background as a whole (considering more than just a few status measures), he found that it had more impact on school attainment than ability scores did. However, he observes, some of this family background effect may have been factors such as achievement orientation, which are not necessarily "non-meritocratic." While family background also had direct influence on both occupational status and earnings, the sizable effect of educational attainment on occupation persisted.

A one-sentence summary may give us a fair perspective on the whole study: Less than one-third of the observed variation in earnings among the Kalamazoo men can be explained by differences in background, education, and tested ability combined. Thus only a small fraction of income inequality can be traced to mom and dad. For example, you and your brother George both have an uncle in the carpenter's union; yet one of you becomes a carpenter, the other a geologist. In short, Olneck concludes that most economic inequality is not due to differences in family, skill, or ability. Rather ruefully, he concludes that he may have been chasing up a blind path.

But let's not give up the chase. What in today's model remains unexplained or random variation, tomorrow, as we strike out on new paths, may all be made clear and true.

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